



AGRICULTURAL OUTLOOK

July 1990

Economic Research Service
United States Department of Agriculture

EC Tackles
"Mad Cow"
Trade Issue

AGRICULTURAL OUTLOOK

Departments

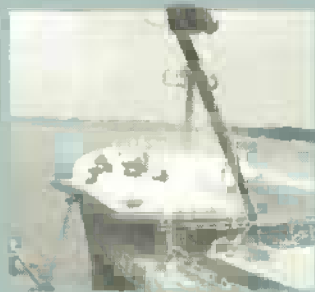
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News of Farm Income, Ag Exports, Soybean Acres, and Farm Policy Issues

World wheat production is forecast to outpace consumption in 1990/91, leading to the first stock increase in 4 years. But coarse grain output is likely to post a smaller gain and trail use, causing stocks to drop for the fourth straight year. So wheat prices are slipping, while coarse grain prices are expected to remain firm. Wheat will figure more prominently in livestock feeds as producers try to hold down costs.

For wheat and coarse grains combined, global stocks are projected to edge up from 16.7 percent of use in 1989/90 to 17.1 percent. But the stocks-to-use ratio has slipped by nearly half during the past 4 years, leaving a smaller cushion against unexpected developments.

In the U.S., unusually heavy rainfall slowed the pace of corn, soybean, and rice plantings. If the wetness cut corn area, some farmers switched to soybeans and sorghum.

The rains also hampered the U.S. winter wheat harvest, but lowered forecast output only marginally. The crop is still expected to be 44 percent above last year's. The spring wheat crop, just out of the ground, is developing ahead of normal.

U.S. agricultural exports in fiscal 1990 are forecast to be 150 million tons, valued at \$40 billion, slightly above a year earlier. However, much of the increase will come from a change in how U.S. exports to Canada are tallied. Beginning this year, underreporting problems will be lessened by relying on Canadian data on imports from the U.S. Nations traditionally keep better track of imports because they collect tariffs on them or regulate them in other ways.

U.S. farm sales are showing some unexpected strength, so income prospects have brightened since March. Farmers' net cash income in 1990 is forecast to range between \$55 and \$59 billion, 2 to



9 percent above a year earlier. That's up \$1 billion from last quarter's annual forecast.

Strong hog prices and firming coarse grain prices are behind the improvement. Net cash income measures the value of commodities sold in a calendar year plus government payments, less out-of-pocket expenses. Direct government payments likely will slip to \$8-\$10 billion in 1990, down 15 percent from a year earlier and down 45 percent from 1987.

Net farm income, however, probably will remain even with last year. Net farm income measures the value of agricultural production plus government payments in a calendar year, less all costs. Still, the recent strengthening in sales boosted the forecast by about \$2 billion.

The rural unemployment rate, at 6.6 percent, remained unchanged from a year earlier in the first quarter of 1990, after declining for 4 years. Rural areas are expected to see more moderate job growth and stable unemployment rates

for the rest of the year. And rural jobless rates probably will remain above urban rates. Over half of all farmers now hold off-farm jobs.

Feed grain program base acres have been singled out as inhibiting farmers' responses to market prices, thereby limiting U.S. soybean area while South American acreage expanded. So, some in Congress are proposing a soybean marketing loan for the 1990 farm bill. Acreage analysis shows that in some regions the feed grains program played a less significant role than other factors in pushing down U.S. soybean acreage.

As world soybean prices fell in the 1980's, nonprogram acreage, primarily in the South, was moved out of soybeans into fallow and pasture, or was reforested. With a marketing loan rate of \$5.75-\$6.00 per bushel, up to 5-6 million of these acres—about half—might return to soybean production over the long run.

For the 1990 farm bill, the Administration has proposed to continue keeping loan rates below expected long run prices. Also, the proposal calls for more planting flexibility, less reliance on acreage reduction programs (ARP's), and a smaller, more market-oriented Farmer-Owned Reserve (FOR).

With loan rates generally below market prices, grain markets would clear most years without farmers selling their crops to the government. And, total grain stocks would decline: the drop in government and subsidized stocks would outweigh the gain in private, unsubsidized stocks.

Less government intervention in grain markets likely would boost price volatility in a severe-drought year, but dampen volatility in the long run, as farmers decided what to plant in response to price signals. However, because FOR stocks would be more available to the market, moderate price runups would be held down in the short run.

Agricultural Economy

Eastern Europe: Rocky Road Ahead

While the recent reforms in Eastern Europe have the potential to profoundly reshape the region's agriculture in the long run, realizing this potential will require overcoming serious structural impediments. And, because the reforms are still evolving, variations in weather likely will have a larger impact on agricultural output in the 1990/91 season.

Previous issues of *AO* argued that in the long run, Eastern Europe has the potential to substantially boost agricultural output and become a net exporter of meat, wheat, and some coarse grains to countries other than the Soviet Union—provided the region's market-oriented reforms were successful.

In addition, *AO* suggested that as the region's economies began to show the benefits of a market system, the demand for imported high-value agricultural products, protein feeds, and feed additives would increase, benefiting U.S. farmers.

Privatization Is the Key

But, this outlook hinges critically on transforming state-run monopolies into competitive, privately owned businesses. And these businesses must be allowed to fail should they be unable to earn a profit.

Such reforms would enable the governments to better control inflation and cut their budget deficits by chopping firm-level subsidies. To make prudent investment decisions that will spur rapid income growth and efficiency gains, pro-



ducers need the profit incentive that comes only with private ownership. Strong private ownership laws also will help attract foreign investment.

If the reforms meet with only limited success, Eastern Europe would still be able to increase exports of certain agricultural commodities by the year 2000. That's because the countries must earn hard currency to pay off international debts.

Yet, should the reforms falter, the region's demand for agricultural imports likely would be weaker, especially for high-value, processed foods. The strong income growth needed to fuel demand for food luxuries would not materialize. Moreover, Eastern Europe's demand for commercial agricultural imports will remain sluggish in the near term.

Short-Term Outlook Is Bleak

Eastern Europe is now in a recession. Strong anti-inflation policies, weaknesses inherited from the old communist regimes, and the costs of the restructuring process are contracting the region's inflation-adjusted total domestic output by just over 1 percent this year. Optimistically, output will be flat next year, and perhaps rise only slightly in 1992.

Many East European countries must continue to pay off burdensome international debts. The region's international hard-currency debt rose 6 percent during 1989 to an estimated \$117 billion.

This year, for example, Poland owes debt payments that equal 74 percent of its export earnings, while Bulgaria and East Germany each owe payments that equal 45 percent of their export earnings. These obligations sap the region's ability to attract new investment funds and sharply limit their ability to pay for imported agroindustrial products.

For the farm sector this year, the first steps towards a market economy have been too recent and too incremental to substantially boost output and trade. For 1990/91, USDA forecasts that the region's grain output will rise a bit more than 1 percent, while meat production in 1990 is likely to drop nearly 2 percent.

Eastern Europe's output of wheat and coarse grains is forecast to be 110 million metric tons, 7.9 percent of world production. That's down from the region's 8.2-percent share in 1989/90.

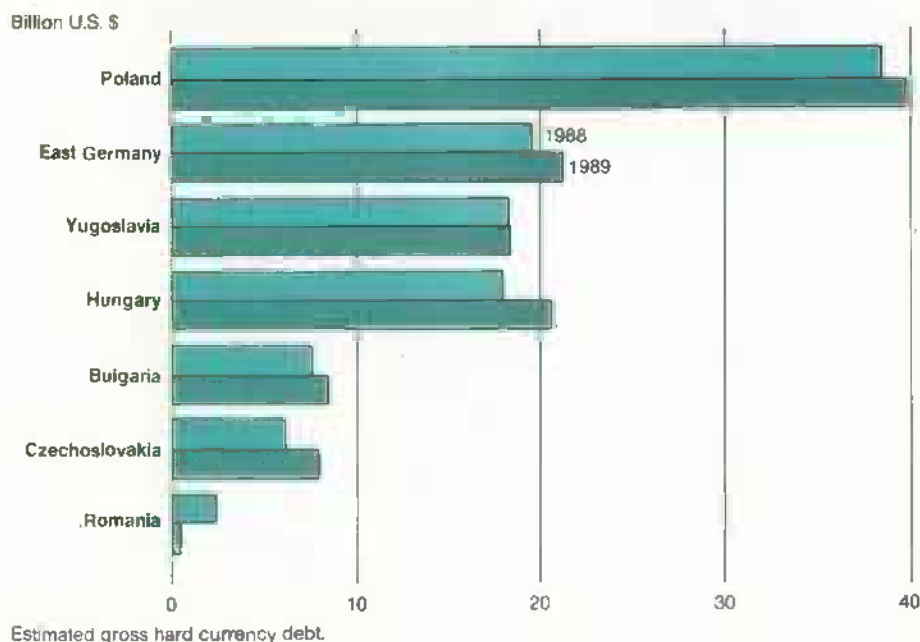
Eastern Europe's grain trade picture suggests an improving trade balance in terms of volume. This reflects, in part, an expected decline in food aid from the U.S. and the EC. Import volume is expected to plummet more than 15 percent while exports will climb nearly 3 percent. However, meat export volume is forecast to decline almost 3 percent, while imports probably will dip less than 2 percent. Overall, East Europeans will eat a bit less this year.

Why Not A Bigger Response?

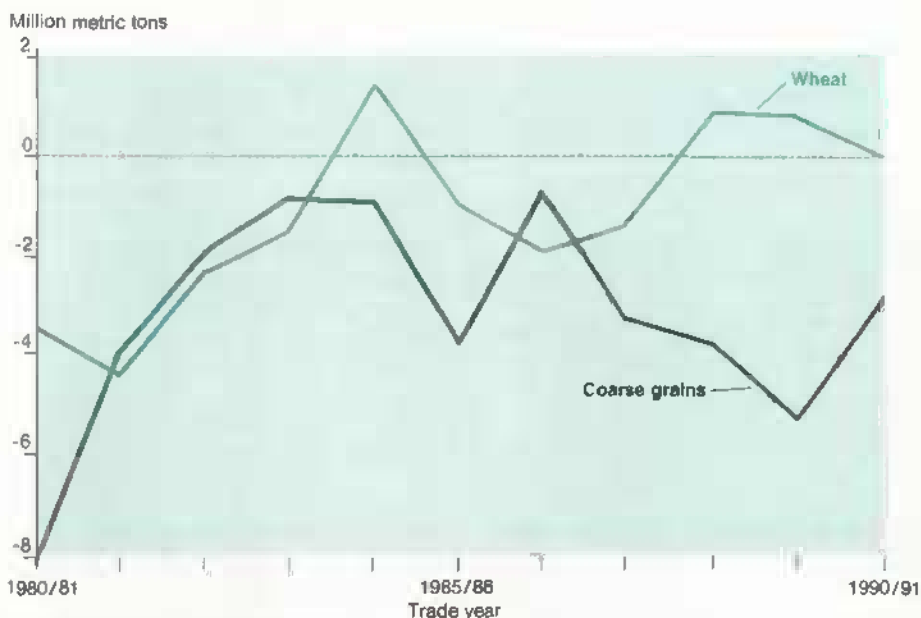
The Polish situation illustrates the kinds of problems faced by East European farmers. Prices were decontrolled at the retail, wholesale, and farm levels. Retail food prices skyrocketed early in the year. But so did the prices of seed, fertilizer, and other farm inputs. Yet the prices received by farmers did not go up as much. Consequently, farmers scaled back plans for future output.

Agricultural Economy

Eastern Europe's International Debt Moves Up



East European Net Wheat Exports Forecast To Slip



In the meantime, farmer unrest has pushed the Polish government to establish the Agency for Agricultural Marketing to carry out intervention purchasing. However, the government is resisting pressures from farmers to institute a wide-ranging system of high support prices.

And, unlike most other East European countries, close to 70 percent of Polish farmland is in private hands. So farmers there are likely to respond more prudently to market incentives. Nonetheless, the large, state-owned collective farms have not yet been privatized.

No other East European country has progressed as far to a market system as Poland. In Yugoslavia, like Poland, most farmers own their land, and also face state monopolies for inputs and marketing. However, the Yugoslav government appears less committed to privatization. Private marketers and input suppliers were recently legalized, though.

Farmers by and large still cannot own land in Bulgaria, Czechoslovakia, East Germany, Hungary, or Romania. While farm managers are increasingly able to make their own production decisions in these countries, most farm-level prices are still controlled. However, more land is being made available to private producers. In Romania, there are rumors that cooperative farms are being broken up.

For East German farmers, reunification with West Germany will eventually mean price supports through the EC's Common Agricultural Policy. But the details on East German farm tenure—small private farms versus larger cooperatives—are still being debated in the reunification talks.

In most East European countries, governments are reluctant to abandon the existing structure of cooperative farms. But, policymakers are moving to give co-op members more autonomy. If co-op members are given the power to make decisions and share in the returns, market-based incentives will work. Co-

The problems rest with near-monopolistic control of the input and marketing channels by state-owned entities. Poland is making some progress on privatizing and breaking up these concerns, but there are practical and social hurdles to overcome in implementing the reforms.

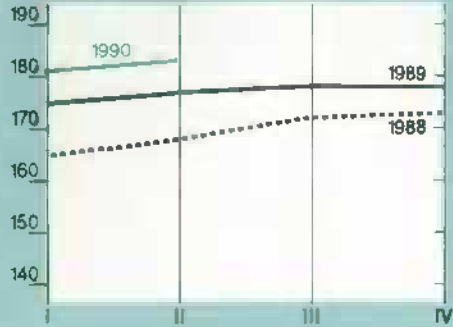
Practically speaking, the problems range from determining asset values to rapidly building up managerial skills. More fundamentally, many people in Eastern Europe are uneasy with the concept of private property and a system that does not foster an even distribution of income.

Agricultural Economy

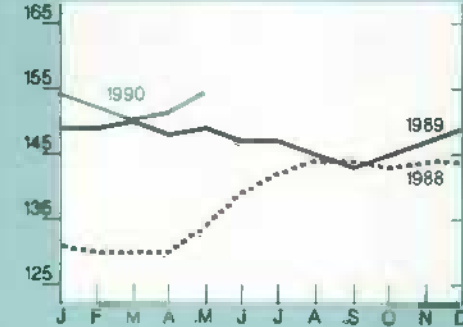
Prime Indicators

Index of prices paid by farmers

1977 = 100

Index of prices received by farmers¹

1977 = 100

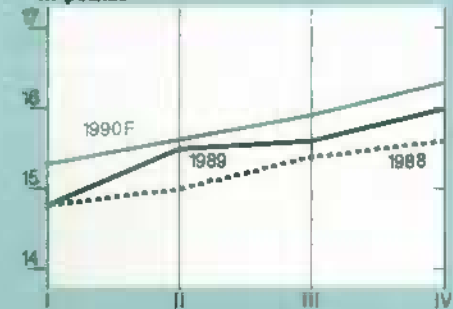


Ratio of prices received/prices paid

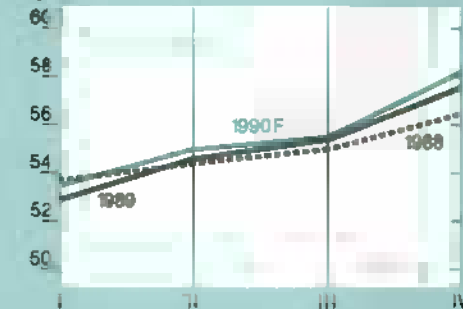
Percent

Total red meat & poultry production²

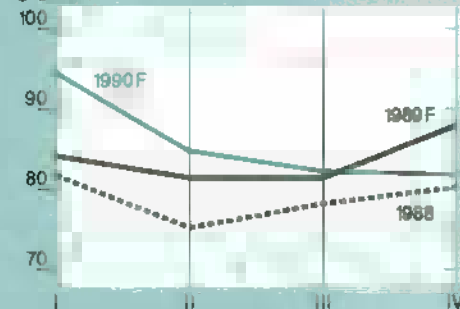
Billion pounds

Red meat & poultry consumption, per capita^{2,3}

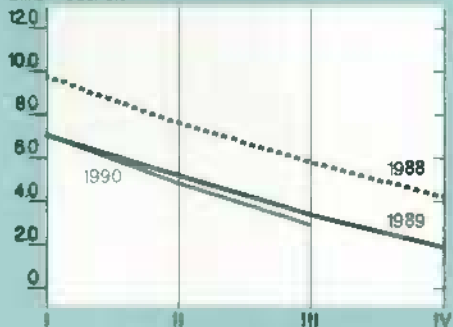
Pounds

Cash receipts from livestock & products⁴

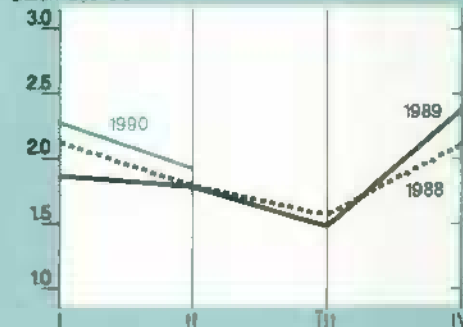
\$ billion

Corn beginning stocks⁵

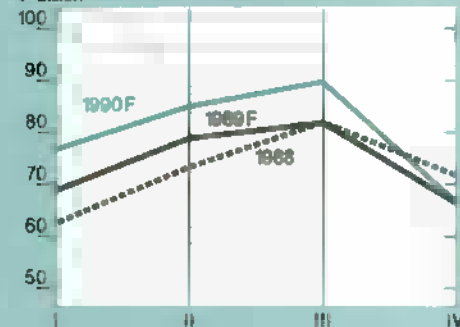
Billion bushels

Corn disappearance⁵

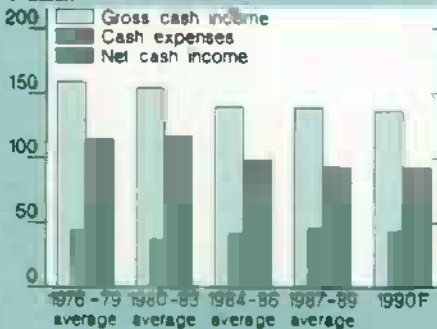
Billion bushels

Cash receipts from crops⁴

\$ billion

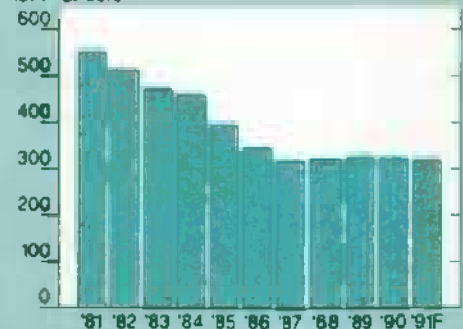
Real cash income⁶

\$ billion



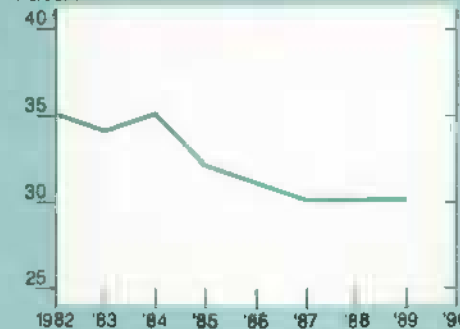
Average real value of farm real estate

1977 \$/acre



Farm value/retail food costs

Percent



¹For all farm products. ²Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. ³Retail weight. ⁴Seasonally adjusted annual rate. ⁵I=Dec.-Feb.; II=Mar.-May; III=June-Aug; IV=Sept.-Nov. ⁶Cash expenses plus net cash income equals gross cash income. F=forecast.


ops also would be able to capture some cost savings because they are bigger than family-owned West European operations.

Outlook Also Depends on USSR

The USSR is Eastern Europe's largest trading partner. Last year, over 70 percent of Bulgarian, Czechoslovakian, and East German total trade was with the Soviet Union. For Poland, the share was about 50 percent.

Since the late 1940's, Eastern Europe has essentially bartered its agricultural and manufactured products for Soviet oil and natural gas. This was to the region's advantage when agricultural prices were low and energy prices were high. That has now changed.

Romania has banned all agricultural exports for 1990 to improve the domestic food situation. The Soviets have agreed to convert trade with Poland and Hungary to a hard-currency basis in 1991. However, there are reports that the Soviets have stopped paying for imports from Poland, and are instead deducting the payments from Poland's debt.

How these trade issues are resolved with the Soviets will be critical to the region's agricultural trade flows. [Gregory Gajewski (202) 786-3313 and Nancy Cochrane (202) 786-1621] 

Livestock, Dairy & Poultry Overview

Fed cattle marketings are above a year earlier. With the seasonal rise in slaughter, cattle prices have begun their usual decline and retail beef prices should follow.

The U.S. Department of Commerce has announced its proposal to lower the countervailing duty on hogs shipped from Canada to the U.S. The reduction likely would mean that more live animals and less processed pork would enter the U.S.

Higher broiler production in 1990 will hold broiler prices below last year. Turkey output continues to expand, but far more slowly than during the first quarter, and prices are likely to strengthen in the second half.

Egg production in 1990 is expected to increase from a year earlier, and wholesale and retail prices should average lower. Milk producers have responded to strong prices; output per cow is up almost 2 percent.

Cattle Slaughter Drops

Federally inspected cattle slaughter during January-May was about 1 percent below a year earlier. Although steer slaughter was up about 1 percent, cow and heifer slaughter declined by 4 and 2 percent. These changes suggest that the cattle herd is expanding. June 1 pasture and range conditions improved by about 8 percentage points from last year, promoting larger cow and heifer retention.

The number of cattle on feed in the seven reporting states has remained above a year earlier since December. Marketings in May increased 16 percent from April and 3 percent from a year earlier; cattle placed on feed in May also increased slightly from a year earlier.

Many prospective yearling feedlot placements remain on the much improved spring pasture, primarily because fed cattle prices have declined and coarse grain prices remain high. But a large wheat harvest and lower wheat prices are likely to result in increased wheat feeding and expanded placements in coming months.

Slaughter cattle prices have begun their seasonal decline. After reaching record highs in April, prices are projected to decline to the low \$70's per cwt by mid-summer, and possibly drop below \$70 for short periods.

Boxed beef prices were record high in April. Prices were expected to stabilize before falling to the low \$120's per cwt during June and then dropping slightly in July due to increased fed slaughter cattle supplies and cold storage stocks. Near record pork cutout values and reduced beef imports likely will provide some support to boxed beef prices.

Retail prices for Choice beef have been setting records since November 1989. The price was \$2.87 per pound in May. However, retail prices are expected to drop through summer, reflecting cattle slaughter increases and lower wholesale beef prices. The farm-to-retail spread is already wide, and probably will widen further as live prices decline faster than retail through midsummer. The spread is not expected to narrow until late summer.

Hog Duty To Decline

On May 21, the U.S. Department of Commerce proposed lowering the countervailing duty deposit rate on live swine other than sows and boars imported from Canada from Can\$ 2.20 per cwt to Can\$ 0.71. A deposit rate of Can\$ 0.68 per cwt would be imposed on sow and boar imports.

Reducing the countervailing duty deposit on live hogs will significantly widen the spread between the deposits collected for hogs and pork (Can\$ 3.80 per cwt) and would encourage the shipments of live animals relative to fresh, chilled, and frozen pork in the near term.

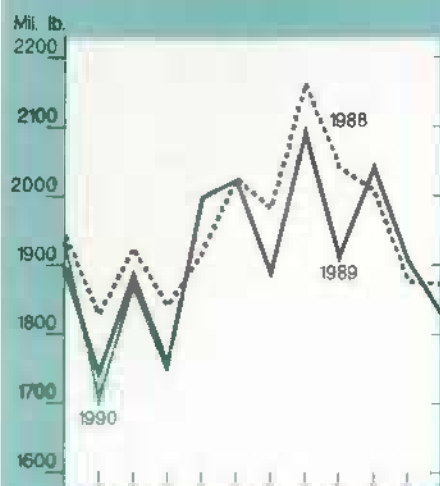
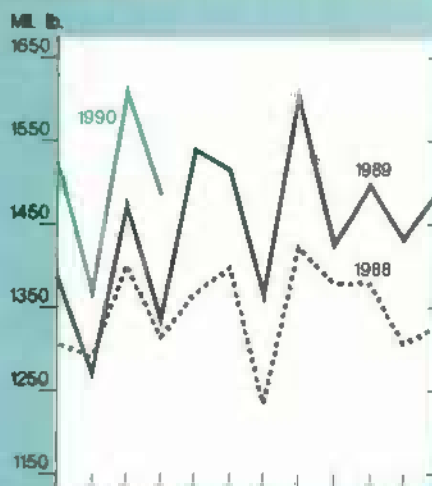
The decision to propose a lower duty was based upon a preliminary determination that the Canadians paid subsidies to hog producers of Can\$ 0.60 per cwt between April 1, 1986 and March 31, 1987 and Can\$ 0.71 per cwt between April 1, 1987 and March 31, 1988.

The proposal to cut the rate is now open for comments and requests to disclose the calculation method. The Canadians argue that the preliminary finding for the second period is too high. A final determination is expected in early August. If the Commerce Department agrees with

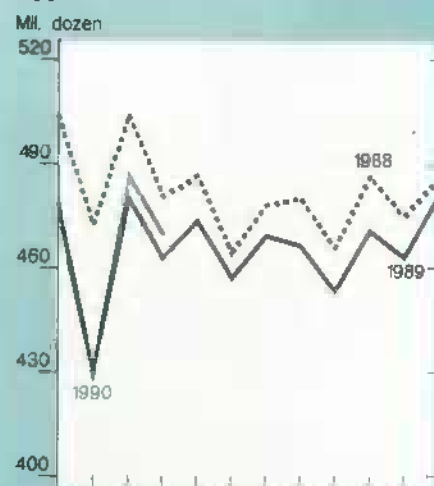
Agricultural Economy

Livestock and Product Output

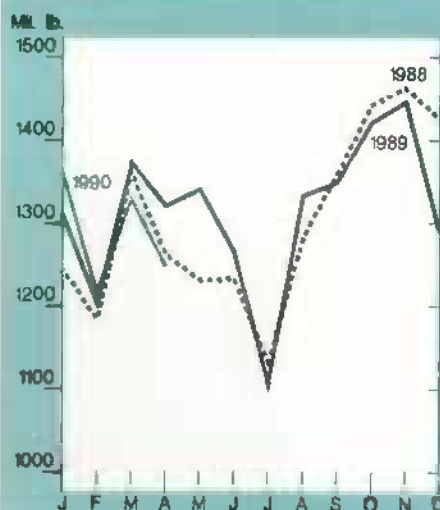
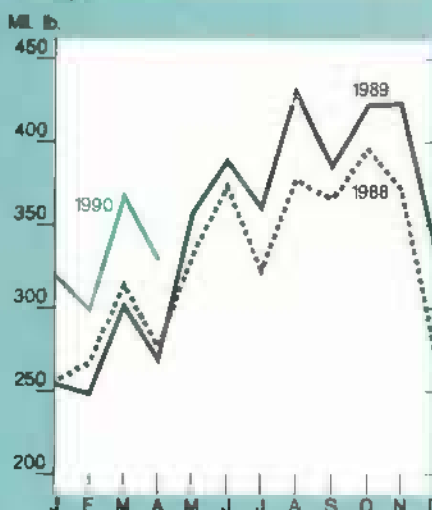
Commercial beef

Broilers¹

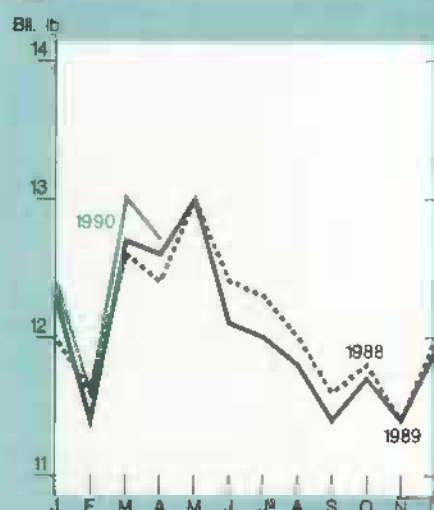
Eggs



Commercial pork

Turkeys¹

Milk



¹Federally inspected production, ready-to-cook.

the Canadians, the duty deposit could be reduced further.

Following publication of the final ruling, producers who shipped live swine during those periods will be eligible to receive refunds equaling the difference between the deposit collected during the investigation periods (Can\$ 4.39) and the duty imposed. The new deposit will remain in effect until the next administrative review is complete.

However, several factors stand to influence the mix later this year or in early 1991. First, the Commerce Department is reviewing the period April 1, 1988 to

March 31, 1989, a time of substantial payouts to hog producers under the Canadian Tripartite Stabilization Program (Canada's agricultural subsidy program). Barring any delays, a preliminary determination will be released as early as late summer.

But any increases in the deposit rate would not become effective until the final ruling is released. At that time, exporters would be liable for payment of the difference between the new deposit rate and the deposit rate in effect when the shipment was made.

Second, under the Canadian-U.S. Free Trade Agreement, the Canadians are appealing the validity of several facets of

the countervailing duty deposit on pork. In one issue before the binational dispute settlement panel, the Canadians are questioning whether subsidies to hog producers are allowed to be passed through to pork producers. A decision is expected September 14.

Also, Canadian producers are challenging the determination by the U.S. International Trade Commission that U.S. producers were threatened with injury. A decision is expected August 24. Under the Canada-U.S. Free Trade Agreement, the binational dispute settlement panel can either affirm the

determinations or remand the case to a determining agency with instructions to reconsider the findings by a given date.

Broiler Prices Below Last Year

The 12-city wholesale broiler price weakened after Memorial Day, and is expected to remain below a year earlier for the rest of 1990 due to larger supplies. May prices averaged only in the high 50's, compared with 70 cents per pound in 1989.

Second-quarter wholesale prices likely averaged 56-57 cents per pound, down from 67 cents a year earlier, reflecting a 7-percent increase in production. Third-quarter prices are expected to average 55-61 cents, compared with almost 60 cents a year ago.

Retail broiler prices probably will fall below a year earlier in 1990, and average 85-91 cents per pound. Second- and third-quarter prices are expected to be 5-6 percent below a year earlier.

U.S. broiler exports are projected to increase about 25 percent in 1990 to over 1 billion pounds, a record. Most of the increase will be broiler parts. The Soviet Union probably will surpass Japan as the top U.S. market this year.

Turkey Growth Slows

Based on poult placements, second-quarter turkey production is believed to have risen 9 percent compared with a year earlier. Third-quarter production may rise just 4-5 percent, reflecting an 11-percent jump in April poult placements. March placements had slowed to only 1 percent above a year earlier.

Yet production continues to decelerate from the 22-percent growth in the first quarter. Output growth in the second half of 1990 will be substantially below last year's 12 percent, and for the year may rise 7-9 percent from 1989.

At 353 million pounds, turkey stocks in early May were 18 percent above a year earlier. Turkey parts stocks were a

record 145 million pounds, up 31 percent, indicating cut-up and further processing use did not fully absorb the large rise in production earlier this year.

Although the stock buildup may slow seasonal price increases, prices are still expected to rise, given slower expected production growth in the second half. Eastern region wholesale hcn prices likely will increase to 60-66 cents per pound during the third quarter, compared with about 60 cents during the second. However, the average annual price is expected to remain below a year earlier.

Egg Production Likely To Rise

A relatively larger laying flock since the beginning of February is expected to raise 1990 egg production about 1 percent from a year earlier. Increases in flock size continue to reflect table-egg producers' response to favorable returns and increases in broiler production.

Egg-type chicks hatched this January-April were over 12 percent greater than a year earlier, indicating a larger flock for the second half of 1990. Third- and fourth-quarter table egg production is expected to increase 1 percent and 2 percent from a year earlier.

The New York wholesale price for grade A large eggs in 1990 is expected to average 71-77 cents per dozen, below 1989. Prices started declining after the first quarter due in part to normal seasonal patterns and larger supplies. May prices averaged 68 cents per dozen, compared with 74 cents in 1989.

Retail egg prices are expected to average 82-88 cents per dozen in the third and fourth quarters, significantly lower than the previous year. For all of 1990, prices likely will average in the mid-90's, down 5 percent.

Milk Output Increasing

Milk production during January-May rose 1.3 percent from a year earlier. The increase largely was in response to strong prices in late 1989 and early 1990.

Cow numbers during January-May were down slightly from a year earlier. Farmers more than likely delayed culling to take advantage of the relatively high milk prices.

Milk production per cow has recovered and is now almost 2 percent above the strong level of a year earlier. Heavier concentrate feeding (spurred by high milk-feed price ratios) helped output per cow overcome the forage quality problems of 1989.

Milk production in 1990 is forecast to rise about 2 percent. Moreover, currently strong milk prices may trigger a fairly rapid expansion in output by yearend.

For further information, contact: Ken Nelson, coordinator; Fred White, cattle; Leland Southard and Shayle Shagam, hogs; Lee Christensen and Larry Witucki, broilers, turkeys, and eggs; Sara Short and Jim Miller, dairy. All are at (202) 786-1285. **AO**

Field Crops Overview

In the U.S., unusually heavy rainfall slowed the pace of corn, soybean, and rice plantings. If the wetness cut corn area, some farmers switched to soybeans and sorghum.

The rains also hampered the U.S. winter wheat harvest, lowering forecast output marginally. Still, the crop will be 44 percent above last year's. The spring wheat crop is developing ahead of schedule.

Globally, wheat production will outpace consumption, leading to the first stock increase in 4 years. But the gain in coarse grain output will be smaller, and stocks will be down. Wheat prices are slipping, while coarse grain prices are firm (see the special article on the 1990/91 global outlook).

Agricultural Economy

World, U.S. Corn Stocks Likely Will Slip

	1988/89	1989/90	1990/91
<i>Million metric tons</i>			
WORLD			
Wheat			
Production	501	535	568
Use	531	538	554
Exports	97	97	101
Ending stocks	117	114	128
Corn			
Production	399	461	480
Use	459	479	483
Exports	64	73	68
Ending stocks	86	68	65
Soybeans			
Production	95	106	—
Use	98	103	—
Exports	23	26	—
Ending stocks	18	20	—
UNITED STATES			
Wheat			
Production	49	55	73
Use	26	29	31
Exports	38	34	34
Ending stocks	19	12	21
Corn			
Production	125	191	206
Use	133	148	152
Exports	51	60	56
Ending stocks	49	32	31
Soybeans			
Production	42	52	52
Use	31	33	34
Exports	14	17	17
Ending stocks	5	8	9

Notes: Exports of wheat and corn do not include intra-EC trade shipments. Data are for marketing years. The wheat marketing year is July/June, and the soybean and corn marketing years are October/September.

Wetness Delays Planting

The pace of sowing spring grains remained slow into June, as rains continued to hamper fieldwork. Many areas were limited to only 1 day of work per week by the end of May. Corn plantings lagged behind normal, and while the overall pace of sorghum planting appeared normal, planting progress has been uneven.

By June 10, 94 percent of the intended corn area had been planted, compared to an average of 99 percent. Farmers in major corn-producing states, including Illinois, Indiana, Nebraska, and Iowa, continued to plant through early June. Excess moisture in each of those states has percolated well into the soils, creating ideal growing conditions, particularly in higher-yielding areas. By the end of May, sowing in the higher-yielding areas was virtually complete.

Soils across the southern tier of the Corn Belt, including portions of Iowa, Illinois,

Indiana, and Missouri, however, generally do not drain as well.

The unusually wet conditions forced some farmers to seek 0/92 protection. Under the 0/92 option, participating farmers are allowed to devote wheat and feed grain base acres to conserving uses and still collect 92 percent of their deficiency payments.

In addition, the unfavorable planting conditions prompted USDA to extend the final program certification date by several weeks to July 15 in 5 states—Illinois, Indiana, Iowa, Michigan, and Ohio. Farmers also may file for "prevented planting," which allows them to plant other crops, such as soybeans or sorghum, on corn program base acres without loss of base history. Sorghum has become a more accepted alternative to corn in recent years.

While yield losses have been associated with late corn plantings historically, summer weather conditions will be the determining factor in this season's yields.

Winter Wheat Harvesting Delayed

Because of wet conditions, U.S. winter wheat production in 1990 was revised down slightly in June to 2.09 billion bushels. But the winter crop is still bigger than last year's entire wheat crop. The same rain system that held up spring grain plantings also delayed the winter wheat harvest in the Southern Plains.

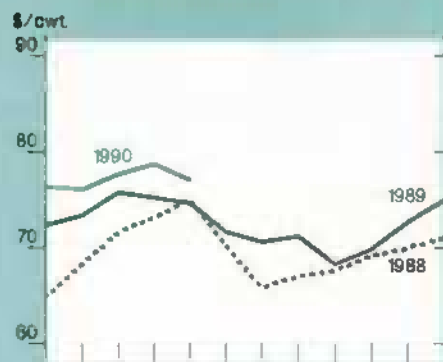
Flooding has caused some wheat losses, especially in Arkansas. Yet despite the rains, Kansas is forecast to produce a record wheat crop. Nationwide, the winter wheat crop was 90-percent headed in mid-June. Heading is on schedule, matching last year's pace as well as the long-term average. In Kansas, heading was virtually complete, and about 10 percent earlier than usual. Some weather conditions continue to promote plant diseases.

The delayed winter wheat harvest has increased Kansas City cash wheat prices, because some domestic processors have been forced to buy limited old-crop

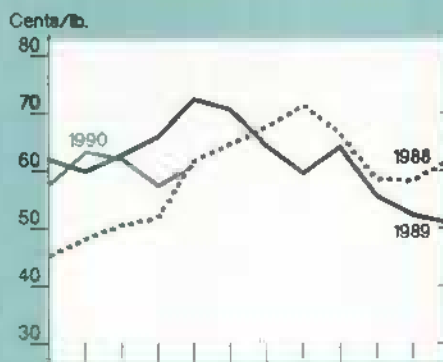
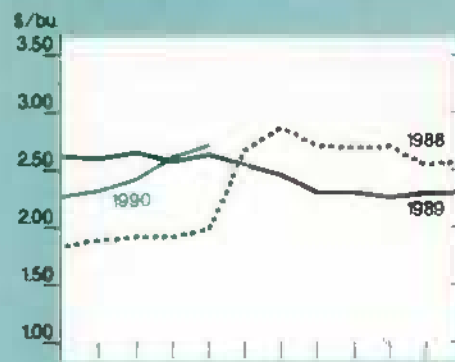
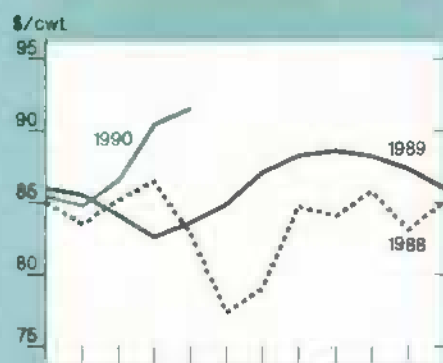
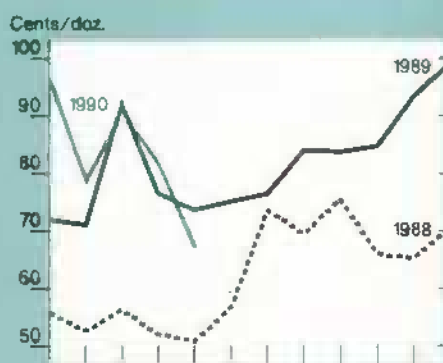
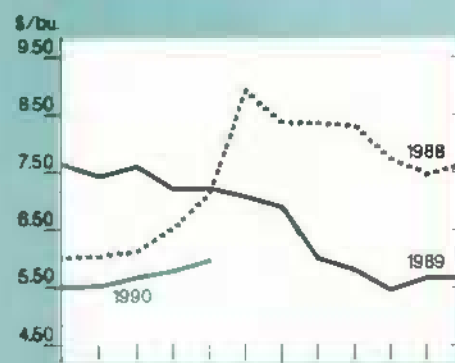
Commodity Market Prices

Agricultural Economy

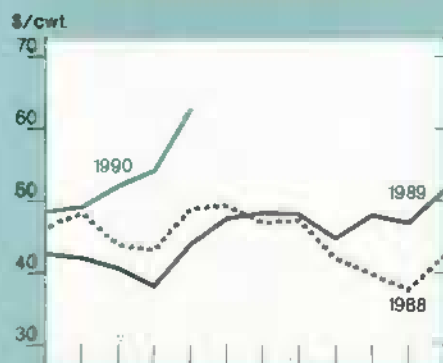
Choice steers, Omaha



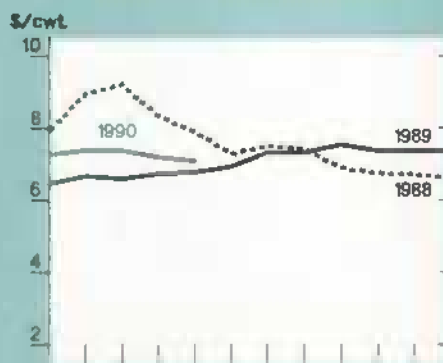
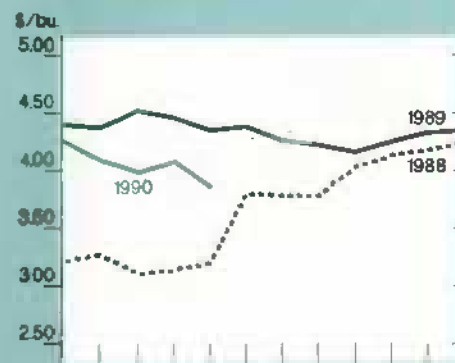
Broilers, 12-city average

Corn, Chicago¹Feeder cattle, Kansas City¹Eggs, New York²Soybeans, Chicago⁴

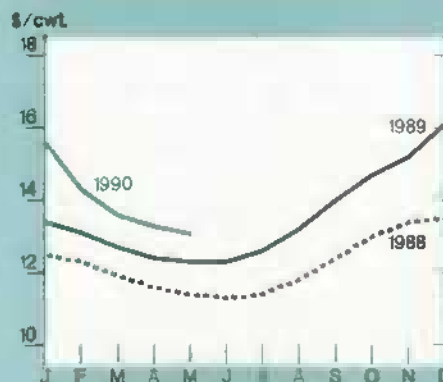
Barrows and gilts, 7 markets



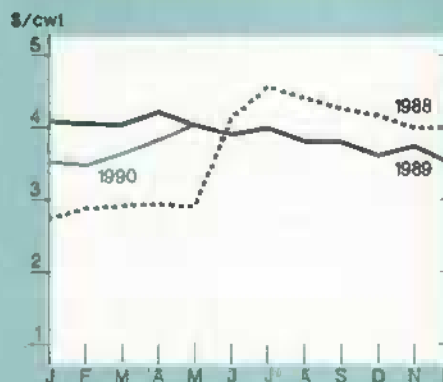
Rice (rough), SW Louisiana

Wheat, Kansas City³

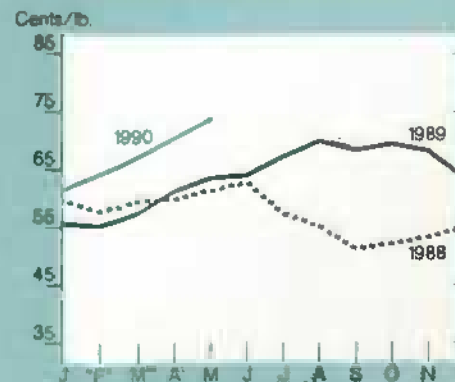
All milk



Sorghum, Kansas City



Cotton, average spot market

¹600-700 lbs., medium no. 2. ²Grade A large. ³No. 2 yellow. ⁴No. 1 yellow. ⁵No. 1 HRW.

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wheat supplies in order to maintain operations. However, exports of hard red winter wheat have been weak, so as new-crop supplies became available during late June, cash prices probably weakened.

The 1990/91 spring wheat crop is developing quickly. By the end of May, 89 percent of the crop had emerged. This was ahead of both last year's 81 percent and the average of the last 5 years. In North Dakota, 88 percent of the crop had emerged, well ahead of normal.

However, this year's spring wheat crop is faring about as well as last year's. By June 17, 79 percent of the crop was rated good to excellent.

Rice Planting Was Held Up

By the end of May, rice planting was significantly behind normal, with only 83 percent of the crop in the ground. But by mid-June, almost all of the crop was in. Planting was normal in three of the five major producing states—California, Louisiana, and Texas. Planting in Mississippi and Arkansas was quite slow.

Reportedly, Arkansas conditions have been poor enough to require aerial seeding in some particularly wet areas. However, only a small portion of Arkansas' rice crop has been affected by recent severe flooding. Nationwide, rice planting would usually be nearing completion by the beginning of June. All of the intended 2.9 million acres reported earlier by growers are expected to be sown.

Late sowing has delayed the development of the rice crop in some states. By the end of May only 65 percent of the crop had emerged, compared with a long-term average of 84 percent. By the middle of June, 86 percent had come up. Development is particularly slow in Arkansas, Mississippi, and Texas.

Soybean Planting Also Lagged

The same wet conditions that slowed spring grain planting across the Corn

Belt also slowed the sowing pace of soybeans. The pace in Arkansas has been behind normal as well. As of June 10, planting was only 66 percent complete. The long-term average for that time of year is 82 percent.

In Illinois, Iowa, and Missouri, planting was significantly behind normal. Seeding was only slightly less behind in Indiana and Nebraska. On the other hand, planting was ahead of normal in Louisiana and portions of the Carolinas.

In March, farmers reported intentions to plant over 59 million acres to soybeans for the 1990/91 crop year. Additional area may be seeded in Illinois, Indiana, Missouri, and Iowa if some farmers were unable to plant corn. Soybean plantings continued through most of June, without necessarily damaging potential yields.

Some uncertainty still surrounds the 1989/90 outlook for world soybean trade. Southern Hemisphere producers have harvested a record 31.5 million tons. But exports from the region, particularly from Brazil, the hemisphere's largest exporter, remain very uncertain.

South American sales of soybeans and meal normally surge in April and May as new-crop supplies become available. But farmers reportedly have delayed marketing because of low prices, uncertainty about future price movements, and hopes for more favorable foreign exchange rates.

The delay in marketing has meant slow export sales from Brazil, creating larger opportunities for U.S. exporters. Foreign crush margins have continued to be favorable, however, so U.S. soybean meal exports are forecast to remain below last year's drought-reduced level.

The early forecasts for 1990/91 call for another record world oilseed crop, up 5 percent from this year's 211 million tons. U.S. exports of both soybeans and meal should expand. USDA will release complete world oilseed estimates for 1990/91 on July 12.

Texas Cotton Setting Bolls

World cotton trade in 1989/90 is reaching a near-record level of about 25 million bales. At the same time, foreign exporter production is down while consumption is up. This has meant falling stocks and export cutbacks abroad, clearing the way for a 28-percent gain in U.S. exports. With supplies very tight, prices are up sharply.

The early forecasts for 1990/91 call for larger U.S. and foreign cotton production. But world production will only slightly exceed use, and stocks will show only a small recovery from this year's depressed level. U.S. exports should remain very strong despite an expected 8-percent gain in foreign output. USDA will issue a full set of country forecasts for foreign cotton on July 12.

Cotton planting, which was 96-percent complete as of June 10, is ahead of the long-term average, and well ahead of last year's pace. Growth and development in most states is around average except for Arkansas and Missouri, where excess moisture has persisted. Too much moisture required some replanting in Louisiana and Arkansas. In parts of Texas, however, plants have already begun to set bolls.

In 1990/91, U.S. cotton production is projected to be 16 million bales, the largest since 1953/54. Early estimates suggest a slight decline in domestic mill use and exports next season. Ending stocks in 1990/91 could increase to 3.8 million bales, slightly below the 4.0-million-bale legislative target. [Jim Cole (202) 786-1840 and Frederic Surls (202) 786-1824]

For further information, contact: Sara Schwartz, world food grains; Edward Allen, domestic wheat; Janet Livezey, domestic rice; Pete Riley, world feed grains; Larry Van Meir and Jim Cole, domestic feed grains; Robert Cummings, world oilseeds; Roger Hoskin, domestic oilseeds; Carolyn Whitton, world cotton; Scott Sanford, domestic cotton; Jim Schaub, domestic peanuts. World information (202) 786-1824; domestic (202) 786-1840. **AO**

Specialty Crops Overview

U.S. horticultural exports for fiscal 1990 are forecast to be 4.5 million metric tons, up from 3.8 million a year earlier. Canada will account for the largest share of the growth.

Wholesale and retail prices for frozen concentrated orange juice are likely to approach record highs for the remainder of the 1989/90 marketing year (December/November) due to shorter domestic supplies. And prices probably will remain high in 1990/91 because of a smaller expected carryin, prospects for a weak Florida crop, and a smaller Brazilian orange crop.

Despite lower retail prices for tomatoes and other fresh items shipped from Florida, the Consumer Price Index (CPI) for fresh vegetables during second-quarter 1990 exceeded a year earlier because of rising potato prices.

World sugar production is forecast to fall short of consumption for the sixth consecutive season in 1990/91 (September/August). Carryin stocks for 1990/91 probably will be the lowest since 1980/81.

Horticultural Exports Exceed Expectations

The forecast for horticultural exports in fiscal 1990 was raised from \$4.3 billion to \$5 billion in May after sales advanced sharply during the first half of the year. Leading the export growth were fresh vegetables, fruit juices, fresh apples and oranges, dried fruit, prepared vegetables, wine, and nursery products.

During October 1989-March 1990, the value of U.S. horticultural exports was \$365 million ahead of a year earlier. Although Canada accounted for most of

the growth, sales to Japan, Mexico, Hong Kong, Korea, the Philippines, and the Middle East also ran ahead of the year before.

Although sales were higher, the bulk of the increased export value to Canada was due to a change in recordkeeping begun on January 1, 1990. In an understanding with the Canadian government, the U.S. replaced its data on exports to Canada with Canadian import statistics.

In recent years, U.S. exports to Canada, especially horticultural products, were undercounted. Countries have traditionally been more concerned about the accuracy of import data because duties are collected on imports.

O.J. Prices Continue High

Retail prices for frozen concentrated orange juice (FCOJ) averaged \$4.48 per gallon during May, up 20 percent from a year earlier. FCOJ prices rose 8 percent from February to May as price increases for Florida's product began showing up in supermarkets.

With less than 15 percent of the 1989/90 Florida valencia crop remaining to be picked, Florida's total FCOJ pack as of the first week in May was down 39 percent from a year earlier. The state's orange crop is forecast to be 25 percent below last season because of damage from freezing temperatures during late December.

Barring any major weather disturbances, 1990/91 Florida production likely will exceed this season's, but may not reach 1988/89's 6.6 million short tons. Dry conditions during the March and April bloom period probably reduced fruit set for the coming season.

In addition, recovery of freeze-damaged trees is slow in some parts of Florida, and there is evidence of longer-term wood damage, particularly in the northern part of the growing region. The first official forecast for the 1990/91 crop will be released in October.

Carryover stocks into 1990/91 are likely to be smaller than normal. Stocks in the first week of May were 12 percent below a year earlier and processing, which usually extends into July, ended in early June. Early indications suggest that the Brazilian crop probably will be down as much as 17 percent, further tightening 1990/91 supplies.

Most Vegetable Prices Drop

The CPI for fresh vegetables soared during the first quarter of 1990, following a killing freeze in Florida and Texas that curtailed supplies during January-March. However, fresh shipments rebounded during April and May, bringing prices for tomatoes, peppers, eggplant, and snap beans down to or below seasonal levels.

Tomato supplies were especially heavy in April and May, because some fields replanted following the freeze matured along with acreage planted for the April harvest. Unusually warm weather added to supplies by speeding up plant development. Retail tomato prices, which rose to an average of \$2.36 a pound in February when supplies bottomed out, fell to 73 cents during April.

Lettuce prices have kept downward pressure on the retail price index during first-half 1990. Lettuce supplies were not substantially affected by the Florida-Texas freeze, and first-quarter prices did not rise with other fresh vegetable prices. Potatoes, lettuce, and tomatoes carry the largest weights in the fresh vegetable CPI.

Retail potato prices were up 18 percent from a year earlier during the second quarter. Potato prices likely will continue above their long-term trend at least until harvest of the fall crop begins in September. Fall potatoes accounted for 88 percent of the 1989 crop.

Potato prices have exceeded their usual seasonal levels since September 1988. The 1988 crop was relatively small,

Agricultural Economy

partly because of widespread drought that reduced yields in the eastern and central producing areas. Output remained below the long-term trend in 1989 and, along with strong demand for processed potatoes, resulted in above-trend prices.

Sugar Remains Tight

Global sugar production in 1990/91 is forecast to be 107.2 million metric tons, raw value, 2.3 million short of consumption. Raw sugar prices (f.o.b. Caribbean, Contract No. 11) for the 1989/90 season through May averaged 14.43 cents a pound, up from the 1988/89 average of 11.93. World carryin stocks for 1990/91 (September/August) are forecast to be 19.3 million tons, down 1.2 million from the year before.

World production in 1990/91 likely will be record high, and about 1 percent above this year's. The output estimate for 1989/90 was revised upward in May to 106.3 million tons because of production gains in India, Pakistan, the EC, Thailand, and Colombia.

But consumption is expected to rise 1.4 percent from the current season, to 109.5 million tons, with the fastest growth occurring among the heavily populated developing countries. India, China, Brazil, Mexico, and Indonesia will account for 30 percent of global consumption in 1990/91, compared with 24 percent 10 years earlier.

India's consumption alone is forecast up 400,000 metric tons from 1989/90. Strong demand, partly reflecting some recovery in the tourist industry, is expected to boost China's use by 200,000 tons. Population growth and increased use of sugar in processed products, such as soft drinks, are driving up consumption in Brazil, Mexico, and Indonesia. In Eastern Europe, domestic sugar use is forecast up 3.3 percent, in part reflecting lower exports.

While sugar use generally expands in developing countries, it is expected to contract in the EC, Japan, and the Soviet

Union. Reduced consumption in the EC is attributable to heightened diet consciousness and inroads made by non-sugar sweeteners. Increasing health and diet concerns, and inroads made by high fructose corn syrup, underlie the decline in Japan's consumption. Widespread sugar rationing will dampen consumption in the Soviet Union.

Stocks at the end of 1989/90 will amount to nearly 18 percent of use, the lowest since 1974/75, when the current statistical series began. Those developing countries lacking the foreign exchange to purchase sugar in the world market will be pressed to further draw down domestic stocks in 1990/91.

World sugar prices were still relatively firm at about 13.5 cents a pound in early June, after exceeding 16 cents at times in April. The tight world sugar market makes prices very sensitive to production shortfalls or any abrupt shift in demand. [Glenn Zepp (202) 786-1883]

For further information, contact: Kate Buckley, fruit; Shannon Hamm, vegetables; Peter Buzzanell, sweeteners; Verner Grise, tobacco; Doyle Johnson, tree nuts and greenhouse/nursery; David Harvey, aquaculture. All are at (202) 786-1883. **AO**

Upcoming Economic Reports

Summary Released Title

July	
12	World Agricultural Supply & Demand
13	Livestock & Poultry
17	China
19	Dairy
	U.S. Agricultural Trade Update
20	Agricultural Outlook
	Livestock & Poultry Update
25	Rice Yearbook
26	Oil Crops Yearbook
27	National Food Review
30	Developing Economies

Commodity Spotlight

Broiler Belt To Grow

U.S. broiler production is concentrated in a few states, mostly in the South Atlantic and South Central regions. And even as the industry continues growing, production is expected to remain concentrated in the Southern states, although some will spill over into adjacent states.

U.S. broiler production grew from 3.7 billion pounds ready-to-cook in 1960 to 17.3 billion in 1989. Some 18.6 billion pounds are estimated for 1990. About 1.8 billion broilers were raised in 1960 and around 5.5 billion in 1989.

Most of the growth occurred in the "broiler belt," which encompasses the Delmarva Peninsula of Maryland, Delaware, and Virginia, the Southeastern States of Georgia, Alabama, North Carolina, and Mississippi, and the South Central States of Arkansas and Texas. California is the only major producer outside the belt.

Industry development in the broiler belt was pushed by local entrepreneurs and aided by the readily available and relatively low-cost work force. In addition, a warm climate helped reduce energy costs while growers used improved production technologies that adapted well to the South. And as production grew, a large support infrastructure developed.

These factors offset the higher costs of feed. Transporting feed grains into the broiler-producing areas and broilers out to major markets was more economical than shifting production into the grain-producing areas or near major markets.

Arkansas Now Largest Producer

In 1960, the South raised 1.4 billion birds, 80 percent of the U.S. total. The South Atlantic States alone raised 43 percent, and Georgia was then the top producer in the country, producing 320



million birds. The South Central States produced 37 percent of all broilers, while Arkansas led the region with 180 million broilers.

By 1970, broiler production became even more heavily concentrated in the South, and the region's share grew to roughly 88 percent, about where it has remained since. In 1989, the South raised 4.8 billion broilers, representing 87 percent of the U.S. total.

After 1960, the South Central region became the leading producer with sharp increases in Arkansas and Alabama. In 1989, the region raised about 47 percent of the nation's total while the South Atlantic raised about 41 percent.

The share of output in the Northeast and the North Central States each averaged less than 3 percent during the 1980's, while the West's share remained relatively constant between 4 and 5 percent.

As broiler production increased, it remained concentrated in 10 states: Arkansas, Georgia, Alabama, North Carolina, Mississippi, Texas, Maryland, Delaware, California, and Virginia. These states' share of U.S. production averaged 83 percent in 1989. Arkansas has been the country's top producer since the early

1960's. Arkansas raised 920 million broilers in 1989, Georgia followed with 812 million, and Alabama was third with 750 million.

Fewer & Larger Processing Plants

Slaughter and processing facilities are concentrated in the South Central and Southeastern areas near most of the growout facilities. A 1989 survey of the 52 largest broiler companies by *Broiler Industry* found that the largest four put out 45 percent of the industry's volume in 76 slaughter and further processing plants.

The survey also found that the top eight companies accounted for about 60 percent of the volume in 105 slaughter and further processing plants, and that the largest 20 had 80 percent of the volume in 156 slaughter and further processing plants.

Approximately 75 percent of the slaughter plants surveyed were in the top 10 producing states. Of 220 plants, 163 were in the broiler belt and California. Arkansas reported the largest number of plants (38), followed by Georgia (29), Alabama (24), Mississippi (19), and North Carolina (16).

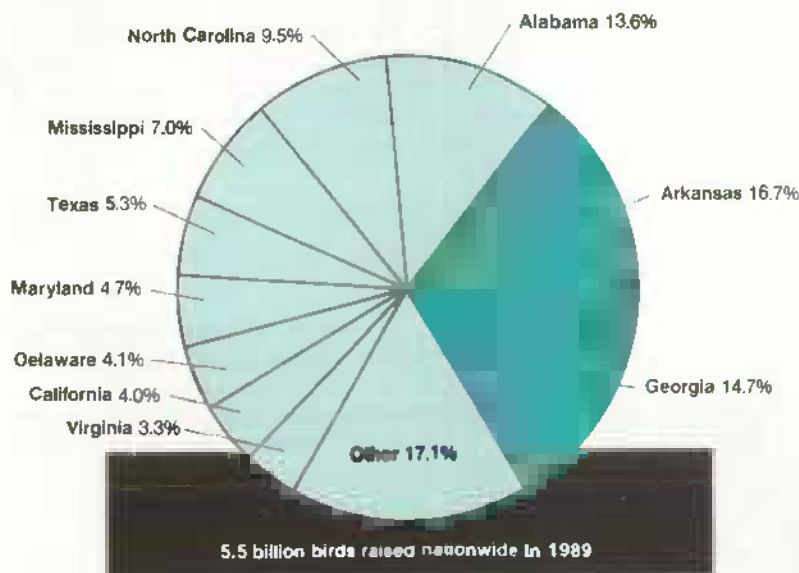
Broiler processing plants continue to grow in size and decline in number. In 1988, 108 firms operated 219 federally inspected plants and slaughtered 5.2 billion birds yielding 16.1 billion pounds of ready-to-cook product. Only 4 years earlier, 134 firms operated 238 federally inspected plants that slaughtered 4.3 billion broilers, yielding 13 billion pounds. Large plants account for all the expansion in output.

Some Growth Coming Nearby

The growth and prosperity of the broiler industry have generated interest in broiler production in states outside the broiler belt that are trying to diversify their agricultural base. So far, however, construction of complexes outside the broiler belt has been very limited and has not significantly affected regional concentrations.

However, a major new complex is under construction in southwestern Kentucky in an area with no existing production, but with plenty of grain and near major markets. The complex, which is to begin operation in late 1990 and process about 800,000 birds per week, may serve as a catalyst for additional growth.

Arkansas and Georgia Are Top Broiler Producers



Percent of total raised.

Commodity Spotlight

Some growth in production is occurring in areas adjacent to the broiler belt as processing plant capacity expands and additional growout facilities are required. For example, Oklahoma and Missouri more than doubled the number of broilers they raised from 1980 to 1989, reflecting a spillover from adjoining Arkansas. Other states raising more broilers include Tennessee, South Carolina, and Pennsylvania.

Although some of this spillover does not reflect major regional production shifts, further growth in traditional broiler areas is becoming increasingly constrained by environmental and economic pressures. High concentrations of broilers result in increasingly complex problems associated with waste management, water quality, and animal disease.

In addition, as urbanization occurs near major growout centers, land prices and labor costs tend to rise, increasing operating costs. Areas with underemployed resources, lighter population densities, and fewer environmental pressures sometimes offer financial and other incentives to attract broiler complexes. [Lee Christensen and Agnes Perez (202) 786-1714] AO

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Why the Drop In Soybean Area?

Soybeans became an important crop in the U.S. in the 1950's. Planted area climbed from 19.7 million acres in 1955 to an alltime high of 71.4 million in 1979. Since that record year, plantings declined to a low of 58.2 million in 1987, before recovering slightly to 60.7 million last year.

Meanwhile, soybean plantings in Brazil, Argentina, and Paraguay rose from insignificance in 1964 to a record 42.7 million acres by 1989. And the South American acreage has increased almost uniformly during the last 25 years. World trade in oilseeds and products has grown twice as fast as trade in wheat and coarse grains.

Feed grain program base acreages have been singled out as inhibiting farmers' responses to price signals, thereby limiting U.S. soybean acreage while South American acreage expanded. As a result, some in Congress are proposing that USDA offer a soybean marketing loan under the 1990 farm bill to boost U.S. planted area.

However, it's likely that the feed grain program is not the only reason for declining U.S. soybean acreage. And, overlooking the other reasons may mean that farmers would plant many more acres to soybeans under a marketing loan than some policymakers now expect.

Soybean Area Has Room To Grow

Regional acreage analysis indicates that feed grain programs played a less significant role in the decline in U.S. soybean acreage during the 1980's than many think. While soybean acreage would have been somewhat higher in the Corn

Belt without favorable corn target prices, most of the gains would have been on the Belt's fringe.

Furthermore, there is sufficient fallow and idled acreage, particularly in the South, to fuel sharp rises in soybean production if prices warrant. Moreover, much of this fallow acreage is fragile and soybeans are a highly erosive crop.

If soybean prices are fixed by a marketing loan much above the market-clearing level, supplies will rise because most of the idled land, although relatively low yielding, would not have another use nearly as attractive, and price risk would be virtually eliminated. If, for example, the marketing loan rate were to be set in the \$5.75-\$6.00 per bushel range, as much as 5-6 million of these acres—about half—might move back into soybeans over the long run.

Such a scenario is likely with soybeans because production was not constrained by program acreages in the Southeast and the Delta, but was reduced in response to lower prices and high yield risks. Soybean prices were lower in the 1980's than in the 1970's, so much of the land moved into fallow and pasture, or was reforested.

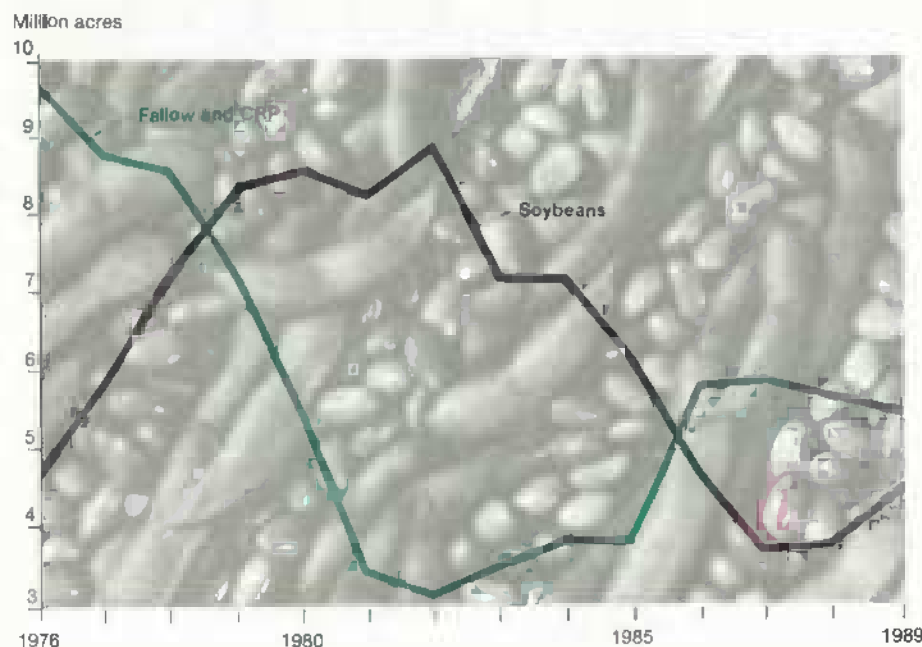
Corn Belt Is Less Dominant

In 1950, the Corn Belt (Illinois, Indiana, Iowa, Ohio, Missouri, and Minnesota) accounted for 79 percent of U.S. soybean acreage. But by 1971, the share declined to 58 percent. Meantime, soybean area in the Delta States (Arkansas, Louisiana, Mississippi, and Tennessee) rose from 10 percent to 23 percent of the U.S. total.

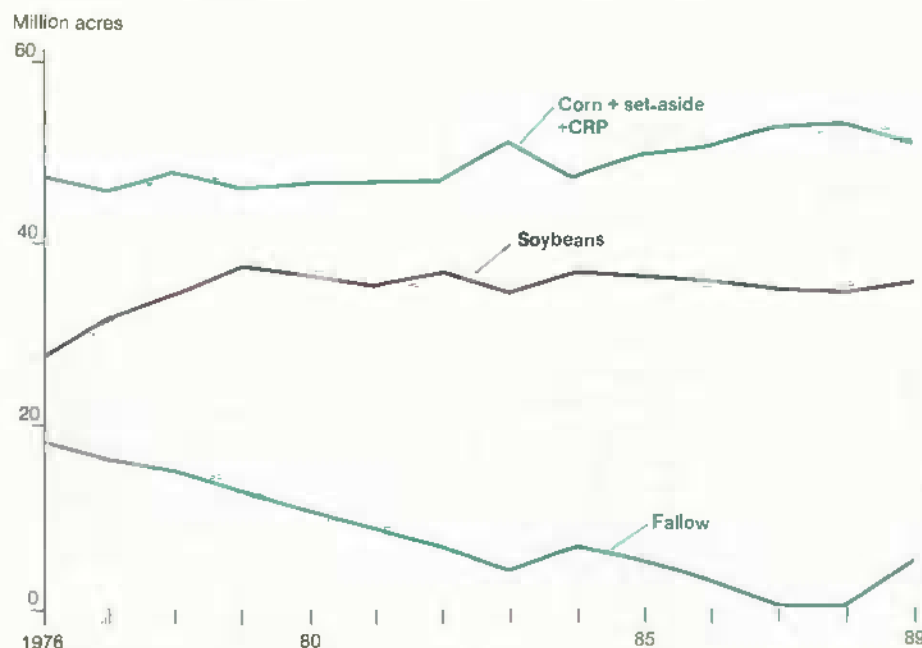
During the 1970's, soybean production continued to expand in the Corn Belt, Delta, and into other regions. By 1979, when U.S. area peaked, 53 percent of acreage was in the Corn Belt, where it climbed to 37.6 million acres. By 1989,

Commodity Spotlight

Southeast's Dwindling Soybean Acres Went into Fallow



In the Corn Belt, Growth in Corn Acres Came Mostly from Fallow



Corn Belt soybean acreage had recovered to 58 percent of the U.S. total, despite a modest decline in plantings to 35.3 million acres.

Since the late 1970's, the importance of the Delta and Southeast has slipped. Planted acres in the Delta declined to 8.6 million by 1989, 14 percent of the U.S.

total. In the Southeast (the Carolinas, Georgia, Florida, and Alabama), soybean acreage rose from 9 percent of the total in 1971 to 12 percent by 1979. But by 1989, acreage there fell to 4.5 million acres, 7.9 percent of the U.S. total.

Only in the Plains (Kansas, Nebraska, and the Dakotas) has soybean area risen steadily from 1.9 million acres in 1971 to 7 million acres, 11 percent of the total, by 1989.

Area Changes
Mirror Fallow

In the Corn Belt, cash grain farming consists of corn and soybeans (and sometimes wheat) in rotation, usually in fairly fixed proportions. But changing relative prices between corn and soybeans can shift small acreages between the two crops. Nonetheless, most of the gain in soybean acres during 1976-80 appears to have come from fallow or minor crop acreages.

Over the next 10 years, soybean plantings remained fairly constant. Even between 1979 and 1986, before the 1985 Food Security Act froze corn program bases, area was flat. The big decline in corn acreage in 1983 was a result of the Payment-In-Kind (PIK) program.

After 1984, drops in fallow and minor crop acreages mirror the rise in corn plus corn set-aside acreage. After 1986, corn plantings declined as a result of set-aside provisions of the 1985 Food Security Act.

Cropping patterns in the Delta are different. Plantings of crops other than soybeans, including set-asides for program crops, rose most sharply from 1979 to 1984 as area rose from about 10.5 million acres to 17 million by 1983. Most of the rise can be accounted for by increased winter wheat production.

Wheat area rose sharply in the Delta from just over 800,000 acres in 1979 to 4.2 million by 1982. By 1989, wheat and wheat set-aside acreage had fallen to 2.6 million. Fallow acreage, which had been declining until 1982, rose from 3 million acres to 5.3 million in 1986.

Unlike the Corn Belt, where soybeans and corn compete for land, in the Delta some soybean plantings are double-

Commodity Spotlight

cropped following wheat. However, winter wheat acreage has usually ranged between a third to less than a fourth of total soybean acreage in the region. So most soybeans were not double-cropped.

Land use data also show that total cropland in the Delta exceeded 34 million acres in 1977, but had fallen to about 31.5 million by 1982. By 1987, cropland totaled less than 30 million acres.

Delta Land Went to Pasture

While some land was undoubtedly lost to urbanization, much was probably returned to forest and pasture, or was idled. The loss of soybean acreage in this region probably cannot be attributed to program crop production. Cotton acreage in the region declined between 1976 and 1982 and then increased, but never exceeded 1 million acres and cannot be considered a factor in declining soybean acreages.

In the Southeast, land use data show that fallow and minor crop acreage almost mirrors the rise and fall of soybean production. Although some fallow acreage had entered the CRP by 1988 and 1989, there were nearly 4 million acres in 1989 that were considered fallow but not in the CRP. Another change in the Southeast was a shift out of feed grain production (mostly corn and sorghum) and a sharp rise in winter wheat plantings.

Moreover, there was a 5-million-acre decline in total cropland in the Southeast between 1977 and 1987. Much of this land probably is in pasture or has been reforested. [Roger Hoskin (202) 786-1840] **AO**

World Agriculture and Trade

European Developments

EC Grapples with Mad Cow Disease

While the recent decisions by France, Germany, and Italy to stop imports of British beef and cattle lasted only for a week, the bans focus attention on animal health issues and their implications for the EC's ambitious program to eliminate internal borders by the end of 1992.

France, Germany, and Italy, which together take more than two-thirds of UK beef exports to the EC, banned the imports because the UK is experiencing an outbreak of a relatively new cattle disease—bovine spongiform encephalopathy (BSE)—commonly called the mad cow disease.

Such restrictions are contrary to EC law. But the bans were lifted after intensive negotiations, signifying another victory for the EC over national interests. All beef with bones and live calves shipped from the UK to the rest of the EC must come with a certificate attesting that they are from BSE-free herds. Boneless beef need not be certified.

BSE attacks the nervous system in cattle, and is similar to scrapie, a disease that strikes sheep. Scientists suspect that BSE was transmitted to cattle through feed containing meat of sheep infected with scrapie. Since 1986, when the first cases were documented, 14,000 cattle have contracted BSE in the UK. No evidence suggests that the disease may be transmissible to humans.

In spite of the problems caused by BSE and other animal diseases for the Community, progress has been rapid in the harmonization of veterinary legislation in the past few months. An agreement in principle was reached to set up regional borders instead of national ones to contain animal disease outbreaks. The agreement is a major step that would allow the



EC to meet its 1993 deadline for eliminating national borders.

The EC also has agreed in principle to rely on either an eradication program or a vaccination program to control the spread of animal diseases. The type of program selected will depend on the disease and will be used by all 12 member states.

Final agreement on these issues would permit greater internal EC trade, which likely would affect both EC production patterns and imports. The EC program will rely principally on health inspections at points of origin and destination rather than at national borders.

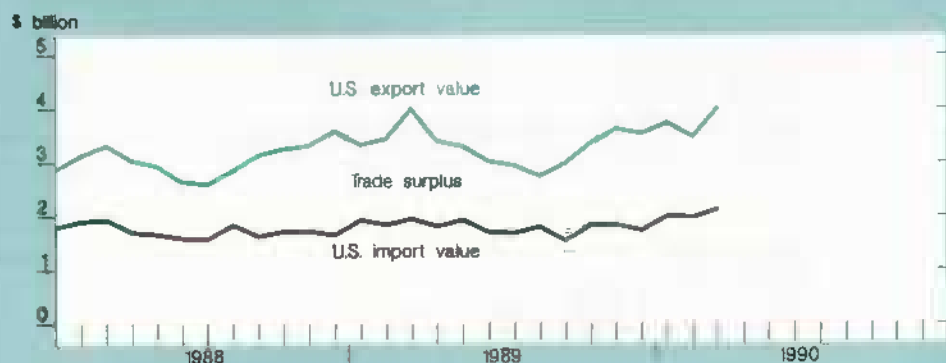
A number of more traditional animal illnesses is causing difficulties for farmers in other EC countries. Parts of Belgium have been struck with hog cholera, and the second major outbreak of Aujeszky's disease in 3 years has forced the slaughter of at least 6,000 hogs in Denmark. Contagious bovine pleuropneumonia has been found in Spain, and growing numbers of Dutch poultry farms are infected with salmonella.

Although part of the cost of slaughtering diseased animals is borne in many cases by the EC, producers lose money when

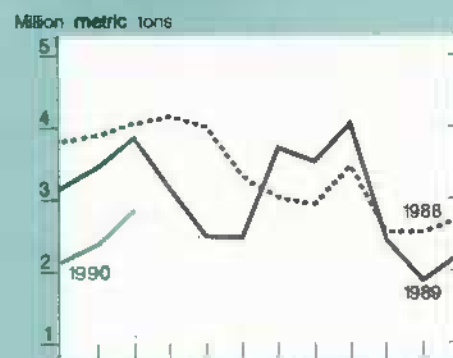
U.S. Trade Indicators

World Agriculture and Trade

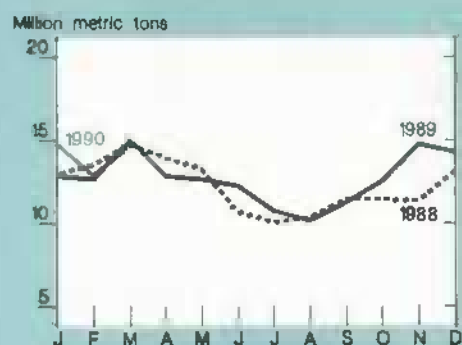
U.S. agricultural trade balance



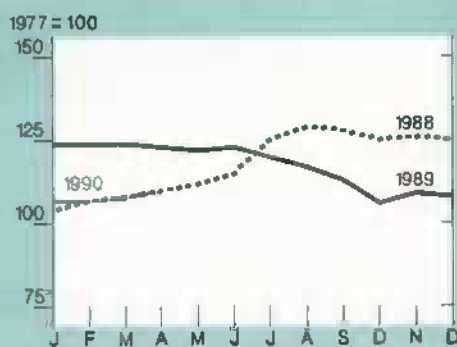
U.S. wheat exports



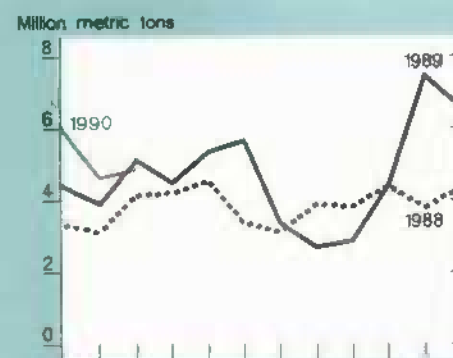
Export volume



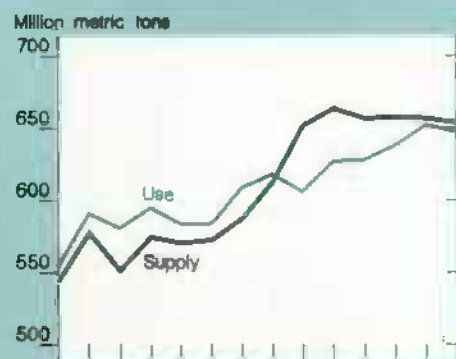
Index of export prices



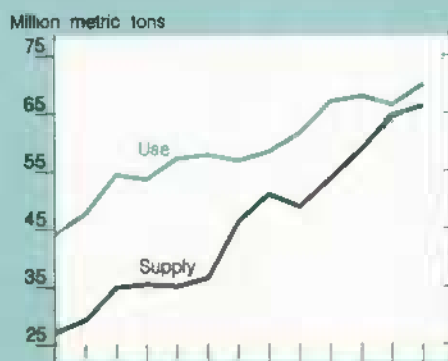
U.S. corn exports



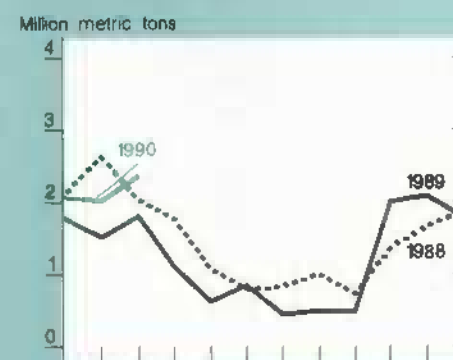
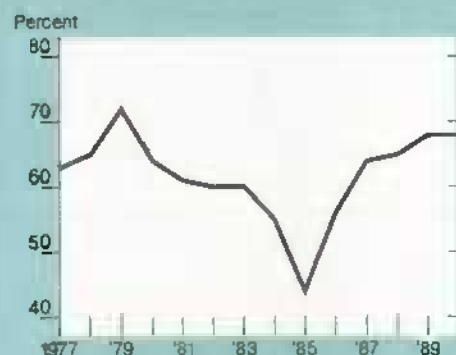
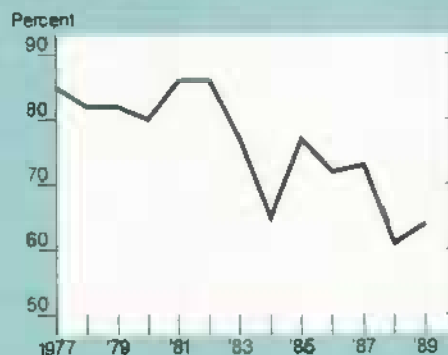
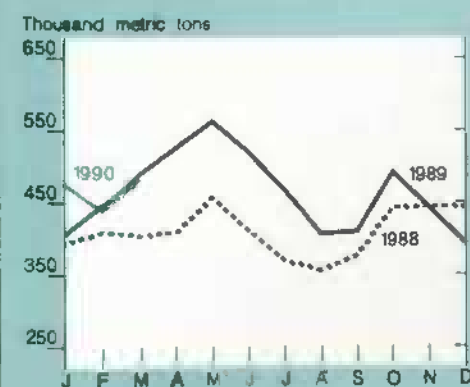
Foreign supply & use of coarse grains



Foreign supply & use of soybeans



U.S. soybean exports

U.S. share of world coarse grains exports^{1,2}U.S. share of world soybean exports^{1,2}U.S. fruit & vegetable exports³¹Excluding intra-EC trade. ²October-September years.³Includes fruit juices.

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their herds or flocks are stricken with such diseases.

U.S. Beef For EC Pets?

Demand for British beef at home and abroad has been pinched by BSE. Last August, the EC Commission prohibited the export of all British cattle born before July 1988 and the offspring of animals infected with BSE. Early this year, the ban was extended to cover all UK cattle over the age of 6 months. Any animal in the Community afflicted with BSE must be slaughtered and destroyed.

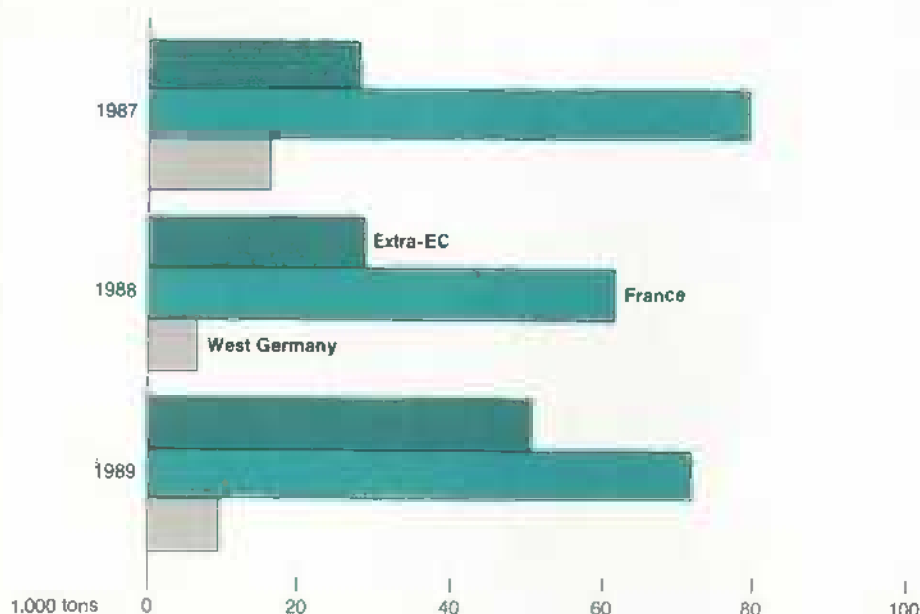
Outside the EC, Austria and the Soviet Union have banned imports of British ruminants and ruminant meats. Saudi Arabia and Qatar have stopped taking UK cattle and beef. Australia, New Zealand, Israel, and Canada have banned UK cattle imports. The U.S., which does not import cattle or beef for human consumption from Britain, subjects imports of semen and embryos from UK cattle to rigorous certification.

Demand for livestock products can plummet if consumers think that animal diseases pose a risk to human health. In late 1988, the British media heavily covered a domestic outbreak of salmonella in eggs. This depressed domestic egg demand, which is only now returning to normal.

A number of British schools have stopped including beef in school meals. Beef prices are depressed in Britain and Ireland, and the EC Commission has decided to open intervention buying of UK beef to help support prices.

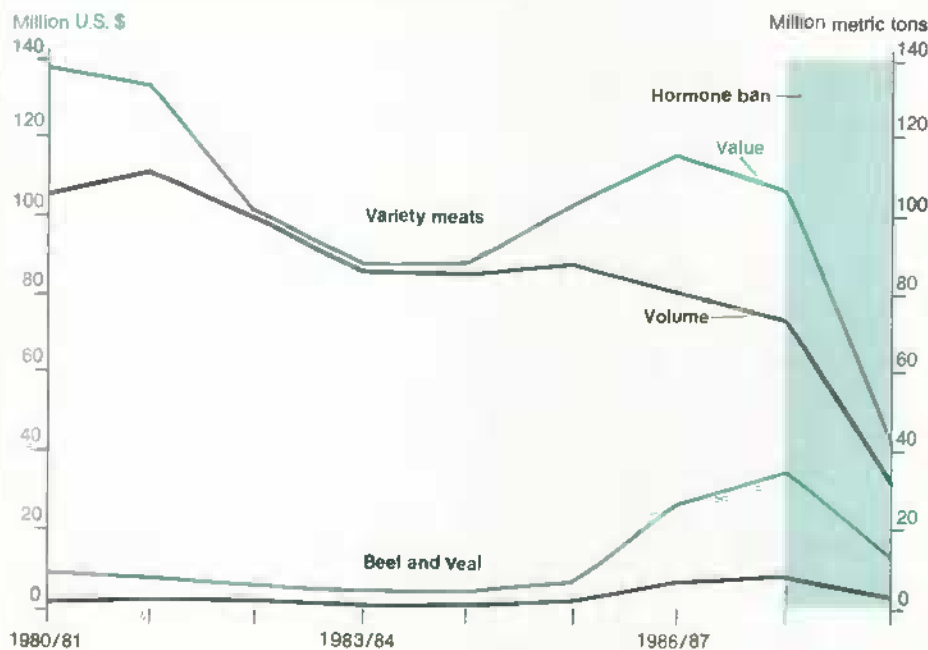
The BSE problem in the UK will boost U.S. meat exports if beef destined for pet food is affected. Prior to the imposition of the EC's hormone ban, the U.S. received permission to ship meat derived from animals treated with hormones to the EC for use in pet food. Up to now, the UK has been a principal supplier of low grade beef for the EC pet food industry.

France Is Largest Market for UK Beef and Veal Exports



Source: UK Meat and Livestock Commission

Hormone Ban Crimps U.S. Meat Exports to EC



Unrelated to the BSE issue, the EC has agreed to allow imports of variety meats derived from U.S. dairy cattle. This trade is potentially worth \$15-\$20 million, and would allow the U.S. to cut its

\$92-million retaliation against the EC because of the EC's ban on meats from animals treated with hormones. [Mary Lisa Madell and David Kelch (202) 786-1610]

Annual EC Farm Bill Approved

On April 27, the EC Council approved the package of agricultural prices for 1990/91. Eleven of the 12 member states agreed to the plan. France abstained from voting because its demand for a reduction in the dairy coresponsibility levy was not included in the final package.

The agreement holds most prices constant in nominal European Currency Units (ECU's), although there were reductions for some citrus fruits and tobacco varieties. Target prices were reduced for beef, milk, and pork, aligning them more closely with the support price for farmers. The target prices are used to calculate import levies, and do not directly affect the prices farmers receive.

While there was little in the way of price changes, the most important developments were in the area of green rates, the exchange rates used for agricultural products, and the rules on intervention buying. Prices are set in ECU's and, when converted into national currencies using green rates of exchange, result in price differences between member countries.

Green rates for the UK and Greece were devalued, which means that their producers will benefit in national currency terms. The strong-currency countries of West Germany and the Netherlands did not have to accept a revaluation of the green rates for cereals, which would have cut prices to their producers.

Farmers will benefit from significant reductions in the time it takes to be paid for grain and butter sold into EC intervention. Instead of waiting 110 days to receive intervention payments, producers will only have to wait 30 days for grain and 45 days for butter. The monthly increments in the intervention price were increased slightly.

These measures will increase the support farmers receive, and will partially offset the impact of the EC's stabilizer, which cuts supports automatically when production exceeds preset targets. The price

package also includes special measures to help disadvantaged small farmers, including an increase in the ewe premium, a program to reallocate milk quotas to small producers in less favored areas, and continues the system of national assistance to small-scale cereal producers.

While the price package has undermined efforts to control overproduction with the stabilizer, the EC is still worried about chronic surpluses. The Council directed the Commission to review the operation of the stabilizer and the set-aside scheme. The Council also is exploring ways to promote the nonfood use of agricultural raw materials.

The EC's Agriculture Commissioner has estimated that the new price package will increase farm spending by \$423 million this year, and \$1.3 billion in 1991. So far, the 1990 agriculture budget is running \$2.5 billion below target, and the increase should not cause difficulties.

Higher world prices for many commodities have helped keep the EC's agriculture budget under control by reducing the amount that must be spent on export subsidies. [Mary Lisa Madell (202) 786-1610] **AO**

U.S. Ag Exports Hold Steady

U.S. agricultural exports in fiscal 1990 are forecast to be 150 million tons, valued at \$40 billion, slightly above a year earlier. Near-record corn exports and relatively strong prices for corn and cotton account for much of the strength. These factors should sustain export value despite post-drought declines in wheat and soybean prices.

However, about \$800 million of the \$40 billion comes from a change in how the U.S. government reports exports to Canada. U.S. exports to Canada have been substantially underreported in recent years, and, beginning in 1990, the end of underreporting will raise export numbers (see box).

Exports likely will post only a \$300-million gain over fiscal 1989. And the expected increase in volume, 3.6 million tons, represents little more than 2-percent growth this year following a 1-percent decline in 1989. Export growth has slowed since 1988, when volume surged 35 percent from 1986.

In addition to a more market-oriented farm policy in the U.S., global economic stability has helped keep exports strong. Although world GNP growth in 1990 is expected to be the slowest since 1983, it should remain above 2 percent. World GNP rose 3-4 percent a year between 1984 and 1989, a time when first the U.S. and then other countries and regions took turns as the "locomotive" pulling the world economy.

This overall economic stability is reflected in the global agricultural economy. World grain consumption is forecast to remain steady at 1.7 billion tons in 1990/91, with grain trade slightly above 230 million tons. And world soybean meal consumption is about even with where it was 2 and 3 years ago.

World Agriculture and Trade

Coarse Grain Exports Up

Following 2 years of 40-percent gains, the value of U.S. coarse grain exports probably will increase again in fiscal 1990, rising 10 percent to \$7.9 billion. And while U.S. corn traded for an average \$120 per ton in fiscal 1989, 1990's average is expected to be slightly lower. Still, corn exports are forecast to be the third highest ever at 60 million tons, and account for almost 40 percent of all U.S. agricultural export volume.

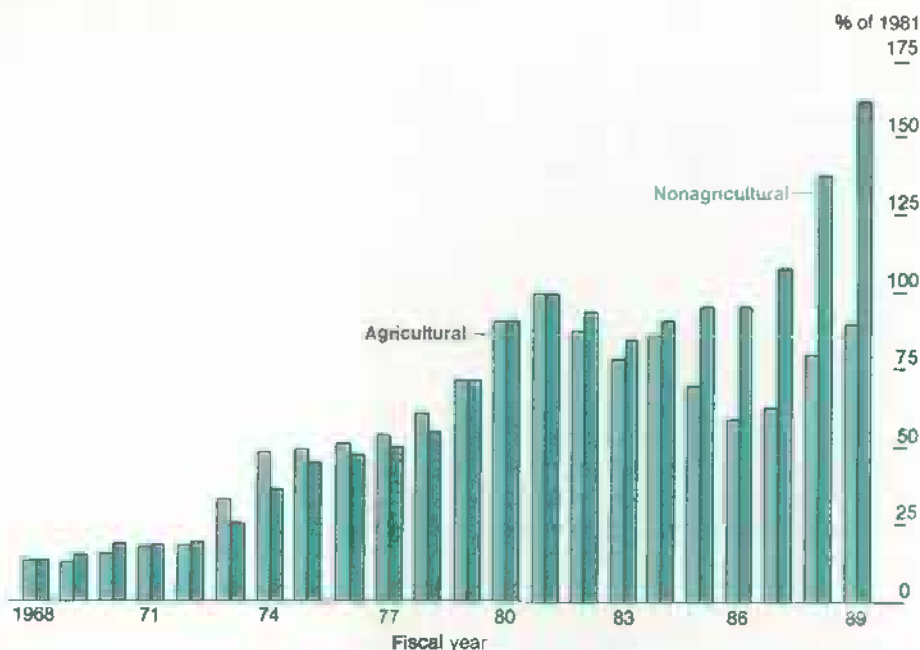
Both China and Thailand are exporting less corn to Asian markets this year, while demand has risen in Korea and Taiwan. Mexico's purchases have climbed substantially; U.S. corn sales to Mexico were 2 million tons above a year earlier in mid-May. And more importantly, exports to the Soviet Union have approached fiscal 1989's record pace.

In fiscal 1989, the Soviet Union surpassed Japan as the largest U.S. grain market for the first time since 1976. Record corn exports drove U.S. grain exports to the USSR to a record 21.8 million tons as the Soviets sought to improve livestock feeding. Although Soviet grain output has been relatively strong in recent years, producers have been reluctant to market their grain to the state.

In contrast, Japan's livestock industry recently has shown little growth as trade liberalization and the yen's strength have encouraged meat imports.

A larger U.S. share of world coarse grain trade this year is likely to be offset by a lower share of wheat exports, leaving the U.S. share of the global grain trade roughly unchanged from fiscal 1989. And larger wheat crops in the U.S. and competing countries weaken the wheat price outlook. With rice exports also

Non-Ag U.S. Exports Outpace Ag Exports



down, U.S. grain exports in fiscal 1990 are forecast to decline about \$800 million.

U.S. oilseed exports are benefiting more from increased trade than grains, although they are expected to endure larger price declines. As with total grains, the U.S. share of world oilseed trade is not expected to change. With the recovery of the U.S. soybean crop, prices are expected to average about one-fourth lower in fiscal 1990, and world trade in soybeans and meal could increase nearly 14 percent on an annual basis.

High-Value Exports Will Grow

U.S. cotton exports are expected to increase 20 percent in fiscal 1990, a 300,000-ton gain despite a drop in world trade. Tight competitor supplies along with falling stocks in the U.S. and overseas have propelled prices. The U.S. share of world trade likely will rise from about one-fourth last year to nearly a third. China, Pakistan, and the Soviet Union will export less this year.

High-value products (HVP) represent another growth sector for U.S. agricultural exports this year. Yet the volume of U.S. fruit and vegetable exports is less than 10 percent of production, compared with about 50 percent for U.S. wheat and 30 percent for corn and soybeans. Similarly, the value of U.S. livestock and livestock product exports is less than 10 percent of producers' cash receipts.

Horticultural exports are expected to climb from \$4.3 billion in fiscal 1989 to \$5 billion in 1990. Livestock and product exports are expected to gain \$100 million to \$6.7 billion in 1990. Beef and pork exports to Japan are expected to increase and poultry exports to the Soviet Union also should go up.

Record HVP exports are expected in fiscal 1990, but without the boost in reported Canadian data, this year's gain would be smaller than in earlier years. Like U.S. nonagricultural exports, HVP exports are in part responding to slowing world growth and already reflect the impact of favorable exchange rate movements since 1985.

Changes in Reporting U.S. Exports to Canada

Under the terms of a 1987 Memorandum of Understanding between the U.S. Bureau of the Census, Statistics Canada, and their respective Customs agencies, the U.S. and Canada have agreed to officially exchange data regarding trade between the two countries.

From January 1990 onward, U.S. Census statistics—the source of USDA's trade data—for exports to Canada will reflect Canadian statistics on imports from the U.S. Canada will do the same using U.S. import data. Traditionally, nations have higher quality data on imports because they collect tariffs on them or regulate them in other ways.

These changes will correct the chronic underreporting of trade between the two countries. For example, unreported U.S. exports to Canada totaled \$16 billion in calendar 1989, or about a fourth of the \$63 billion originally estimated by the U.S. For agricultural products, underreporting probably represented about 50 percent of reported exports.

When fiscal 1990 ends, Census data for the year will include 3 months with data reported under the old system and 9 months under the new. To adjust for this change, USDA's forecast for fiscal 1990 U.S. agricultural exports to Canada has been raised to \$3.1 billion. Of this \$900-million increase, \$800 million is due to the reporting change.

agricultural and nonagricultural exports grew in tandem, but since 1981 agricultural export growth has been slower.

In part, this reflects a decline in prices of primary products relative to prices of manufactured goods, but there is more to the story. Nonagricultural exports are likely to approach a record peacetime share of GNP in 1990, about 6 percent, while agricultural exports (including processing and transportation costs) are forecast to be less than 25 percent of U.S. farm cash receipts, below the average of the last 15 years.

U.S. agricultural exports are constrained by events in critical markets. Developing nations' international debt cuts their purchases of U.S. agricultural products by about \$3 billion a year. Eastern Europe also is hampered by a large debt burden; the region's purchases of U.S. agricultural products are down 80 percent, \$2 billion, from the 1980 peak.

At the same time, the EC's Common Agricultural Policy has enabled the Community to swing from one of the largest customers of U.S. agricultural products to one of its biggest competitors.

Some major events would boost U.S. agricultural exports in the long run. Although little impact is expected in the next few years, Eastern Europe's radical political transformation offers some hope for U.S. agricultural exports if the countries can revitalize and privatize their economies. Similarly, the GATT negotiations may substantially boost exports. And progress on the international debt problem would mean higher U.S. agricultural exports to developing nations.

[Stephen MacDonald (202) 786-1822] **AO**

U.S. Share of Cotton Market To Surge in 1990/91*

	Grains	Soybeans and meal	Cotton
	Percent change from previous year		
World import demand	**	+8	-4
U.S. market share	**	**	+30
Export unit values	-5	-25	+15

*Export unit value estimates based on fiscal year data. Other items based on USDA marketing year forecasts. **Approximately no change.

Non-Ag Export Growth To Slow

Nonagricultural U.S. export growth also is expected to slow in 1990. In real terms, the U.S. deficit in nonagricultural trade is just now falling to pre-1984 levels. Moreover, bulk agricultural exports have already worked through much of their gains from U.S. policy changes under the 1985 farm legislation, and non-agricultural as well as HVP export growth appears to have peaked, at least temporarily.

The agricultural trade surplus has rebounded and nearly tripled since 1986, almost solely due to increased exports. Imports have risen marginally, with 1990's expected \$22 billion a little more than \$1 billion above 4 years earlier. In contrast, nonagricultural imports are likely to show a \$100-billion gain.

On the other hand, U.S. nonagricultural exports in recent years have shown surprising strength compared with agricultural exports. Between 1968 and 1981,

Farm Finance

Farm Sales Strengthening

The improved outlook for 1990 farm sales has brightened income prospects in the past several months. Gains in cash receipts are expected to outpace increases in expenses. Strong demand should continue to support most commodity prices.

However, higher feed grain prices will mean higher feed costs for livestock producers. In addition, stronger market prices will lower government deficiency payments.

Growth in crop sales of 4-9 percent and up to 4-percent higher livestock sales are likely to raise total receipts to between \$162 and \$168 billion in 1990. Net cash income is forecast to range between \$55 and \$59 billion, 2-9 percent above a year earlier. That's up \$1 billion from last quarter's annual forecast. Net cash income measures the value of commodities sold in a calendar year plus government payments, less cash costs.

Although net farm income for 1990 is currently expected to be \$2 billion higher than earlier forecasts, it is still expected to grow less than net cash income. Net farm income probably will be about the same as in 1989, ranging between \$47 and \$51 billion. Net farm income measures the value of agricultural production in a calendar year plus government payments, less all costs.

This year, net cash income likely will grow more than net farm income because farmers will continue selling crops raised in 1989. At least half of cash grain sales during 1990 will be crops that were harvested in 1989 and held until this year. Changes in the inventory of agricultural products are expected to be much smaller this calendar year because cash grain pro-



duction is expected to increase 10 percent, compared with 35 percent in 1989. So, net farm income will not grow as much as last year.

Record Crop Receipts Expected

Farmers likely will sell \$2-\$4 billion (12-24 percent) more feed grains in 1990 than a year earlier, bringing total crop receipts to a record \$77-\$81 billion. Fall corn prices are not likely to weaken as much as previously expected, so the annual price could remain near last year's average of \$2.40-\$2.45 per bushel.

Higher estimates of feed grain exports and domestic feed use support these price projections, despite a possible 5- to 10-percent increase in production. A tight stocks situation also is behind the stronger price forecast. Sales of feed grains other than corn also are expected to increase, pushing up total feed crop receipts to about \$20 billion.

Wheat production is expected to be up a third, while prices probably will average 15-20 percent less than during 1989. Cash receipts are expected to rise by 5 percent or less for wheat, cotton, fruits, and vegetables.

Soybeans probably will be the only major crop showing smaller cash receipts in 1990. Soybean prices are expected to

be down about 15 percent from a year earlier. And with little change in production, soybean receipts are likely to be off 4 percent.

Total livestock receipts are forecast up as much as \$3 billion from a year earlier to between \$84 and \$87 billion. Reduced pork production and tight supplies are pushing hog prices up more than 20 percent from last year's average, while relatively stable beef production is likely to lead to a 3- to 4-percent increase in prices. So, cattle and calf receipts are projected to be up as much as 8 percent from 1989, while hog receipts are expected to grow as much as 20 percent.

Poultry output is forecast to be up about 7 percent, although price declines of 6-7 percent probably will keep total poultry and egg receipts flat at about \$15 billion.

Expenses To Edge Up

With feed grain prices showing less weakness than previously expected, the 1990 index of prices paid for feed probably will drop less than 10 percent. That's compared to a 20-percent decline expected last quarter. So, feed expenses likely will drop only 2 percent and stay within \$1 billion of last year's \$24 billion.

Uncertainty about feed costs may be behind producers' cautious approach to expanding herds, despite higher hog and cattle prices. Cattle numbers are about the same as last year, but hog inventories are down slightly from March 1, 1989.

Expenditures for manufactured inputs, overhead, and operating expenses are likely to increase 3-5 percent. Interest expense is expected to stay near \$15 billion for the third consecutive year. Total cash expenses probably will be up slightly, ranging from \$121 to \$124 billion. Total production expenses are forecast to show the same relatively modest

increase, ranging from \$142 to \$147 billion this year.

Direct government payments to farmers likely will fall \$2 billion as disaster assistance declines from nearly \$3 billion in 1989 to less than \$1 billion in 1990. However, softer market prices for wheat and lower acreage reduction requirements probably will result in higher deficiency payments under the wheat program.

Nonetheless, recent price strength is expected to lower payments for other program crops, leaving total deficiency payments about the same as in 1989. Total direct payments received in 1990 are expected to be \$8-\$10 billion, 15 percent less than a year earlier and down 45 percent from 1987.

Midwest To Show Largest Gains

Net cash income is projected down 2-3 percent in the Northeast, which accounts for about 20 percent of U.S. dairy receipts and 10-15 percent of poultry cash receipts. If dairy receipts drop as expected in 1990, the region's livestock cash receipts would dip \$100 million. Although the Northeast provides only 3-8 percent of total corn, fruit, and vegetable receipts, these crops are important locally and probably will be responsible for raising crop receipts.

The South Central region accounts for about 25 percent of poultry receipts, over 50 percent of cotton sales, and 20-25 percent of feed grain receipts. An expected 5-percent increase in crop receipts in this region is attributed to growth in cotton and feed grain sales. Regional livestock sales are likely to rise \$500 million.

But government payments there probably will drop 30 percent and cash expenses are expected to increase \$200 million, so net cash income will be roughly unchanged from 1989.

The \$2- to \$4-billion projected gain in total feed crop receipts should boost Midwest crop receipts. Because the Midwest accounts for 45 percent of all food grain sales and 70 percent of feed crop

Midwest To See Largest Income Gain

	<u>Cash receipts</u>		Government payments	Cash expenses	Gross cash income	Net cash income
	Crops	Livestock				
\$ billion						
1989F						
Northeast	4	7	**	8	12	4
Midwest	28	37	5	53	72	20
Southeast	12	12	1	17	27	10
South Central	9	13	2	17	25	8
West	21	15	2	26	38	12
1990F						
Northeast	4	7	**	8	12	4
Midwest	30	37	5	54	75	21
Southeast	13	13	1	17	28	11
South Central	9	14	2	18	25	8
West	22	15	2	27	40	13

F=forecast May 15, 1990. Rounded to the nearest \$1 billion. **Less than \$1 billion.

Production Expenses Forecast Up Slightly

	19889	1989 F	1990 F
\$ billion			
Farm-origin inputs	38.4	41	38 to 42
Manufactured inputs	19.4	22	21 to 24
Total interest charges	15.2	15	14 to 16
Other operating expenses	32.3	34	33 to 37
Other overhead expenses	29.6	31	31 to 33
Total production expenses	135.0	142	142 to 147
Cash expenses	114.4	121	121 to 124

F=forecast

receipts, crop cash receipts are expected to be up 8-9 percent there in 1990.

Higher hog prices are likely to boost Midwest livestock receipts. Although the region's direct payments probably will drop more than 10 percent (\$700 million), and cash expenses climb \$900 million, net cash income likely will increase nearly 9 percent in the Midwest.

Higher cash receipts are projected for two of the Southeast's major commodities, tobacco and poultry. And although fruit and vegetable receipts are expected to increase nationally, the Florida winter crops were damaged by frost.

The Southeast also accounts for 15-20 percent of oil crop receipts. Soybean prices are projected down 15 percent from last year, but peanut sales are expected to be up nearly 25 percent

nationally. However, a projected \$200-million drop in government payments and \$200-million rise in expenses will partially offset the \$1-billion gain in receipts and keep the region's net income from climbing more than 6 percent.

Crop receipts in the West are expected to rise by \$1 billion in 1990. Farms in the West usually provide 25 percent of food grain receipts, almost 35 percent of cotton, and 55 percent of vegetable cash receipts. Cotton and vegetables stand to boost crop receipts in the West by almost \$250 million. With little change in direct payments and only a small increase in cash expenses projected for the region, net cash income likely will rise the same amount as crop receipts, or 8 percent from 1989. [Diane Bertelsen (202) 786-1798] AO

Farm Finance

Lending Linked To Crop Insurance

Recent survey results show that about 17 percent of farmer borrowers who bought federal crop insurance for 1988/89 said they did so in order to obtain a loan. Borrowers were more likely to say they were required by their lender to buy federal crop insurance if they obtained the bulk of their credit from the Farm Credit System (FCS) or the Farmers Home Administration (FmHA).

Even though commercial banks and the FCS state they do not require crop insurance as a precondition for lending, about 4 percent of farmers with loans said they were required to buy federal crop insurance by their lender.

Roughly half of the farms represented by the survey had some form of debt, and 23 percent of these indebted farms participated in federal crop insurance in 1988/89. Lenders view crop insurance as one way to reduce financial risks and help ensure loan repayment.

Until recently, only a few localized surveys examined how agricultural lenders viewed the importance of their

borrowers' use of crop insurance. For this new analysis, however, USDA's Farm Cost and Returns Survey (FCRS) data for the 1988/89 crop year were enhanced by a special survey on farmers' production and insurance risk.

Borrowers' and Lenders' Views Differ

Commercial banks and the FCS have stated that they never require crop insurance as a prerequisite for lending. FmHA has required federal crop insurance participation for some loan contracts in some years.

But a 1986 survey of South Dakota lenders showed that 31 to 38 percent of commercial banks encouraged federal crop insurance as a useful management tool for farmers facing average financial risk. For farmers facing higher financial risks, those figures rose to 44-61 percent.

In the new survey, agricultural borrowers, rather than lenders, were queried. Borrowers were asked whether, and by whom, they had been required to take out crop insurance as a prerequisite for getting a loan.

Of the roughly 12,000 FCRS participants, the new survey focused on the 3,000 that received 50 percent or more of their receipts (including government payments) from one of six major crops: corn, wheat, sorghum, soybeans, cotton, and rice.

The new survey was a telephone follow-up to the FCRS. The FCRS is an annual survey designed to assess costs of production and returns in agriculture. It is a stratified random sample which was then weighted to reflect the total population of these farms.

About 17 percent of all farm operators represented by the survey who bought

Borrowers Using the FCS or FmHA as Primary Lender Were Most Likely To Be Asked To Buy Crop Insurance

Lender*	Lenders requiring crop insurance	Lenders not requiring crop insurance
	Percent of average farm borrower's farm debt held	
FCS	56	25
FmHA	49	12
Commercial Banks	44	45
Other	3	15

*Excludes life insurance companies. Source: USDA/NASS

Crop Insurance Participation Among Farm Borrowers, by Lender 1/

Lender	Total required	Lenders required as % of total required	Required as % of lender's insured borrowers	Required as % of lender's total ag. borrowers	Total insured borrowers as % of lender's total ag. borrowers
	Number of farmers		Percent		
FCS	2,014	14	24	5	21
FmHA	4,006	28	61	22	36
Bank	8,870	48	26	4	16
Life ins. companies	63	**	3	1	25
Other	1,367	10	4	1	30
Total*	14,320	100	2/ 17	2/ 4	2/ 23

1/ Survey results were expanded to the population of farmers. Required participants are those who said they were required to buy federal crop insurance as a prerequisite for obtaining a loan from the lender in question. Voluntary participants include both those that no lender required, and those that were required by some lender(s) other than the one in question. 2/ Average across all lenders. **Less than 1 percent. Source: USDA/NASS.

Farm Finance

federal crop insurance reported doing so because of a requirement by their lender. But looking at just the number of loans can be misleading. For example, lenders in the "other" category make mostly small loans. "Other" lenders made a greater number of loans than any other lender group except the commercial banks, but accounted for only 19 percent of farm loan volume in 1988.

Considering just the three major lenders, (FCS, FmHA, and commercial banks), almost 31 percent of their borrowers represented by the survey who bought federal crop insurance said they did so because of a requirement by their lender. FCS, FmHA, and commercial banks together accounted for about 80 percent of farm loan volume in 1988.

Banks, FmHA Rely Most Heavily

Which lenders most often required federal crop insurance participation? According to their customers, commercial banks and FmHA most frequently required the insurance. Of the total number of borrowers who said they were required to purchase federal crop insurance in order to get a loan, almost half were required to do so by commercial banks. Roughly another third said they were required by FmHA, and one out of seven by the FCS.

Which lender required the largest proportion of its farm clients to participate? FmHA most often required its borrowers to participate, with almost 22 percent of all its loan contracts carrying the crop insurance stipulation, according to borrower responses.

Of the 2,014 FCS borrowers who said they were required to take out federal crop insurance, 56 percent of their total debt, on average, was contracted with the

FCS. For those FCS borrowers who were not required to participate, only 25 percent of their total debt, on average, was contracted with the FCS.

Yet, for commercial banks and other lenders, borrowers who were not required to participate in crop insurance on average had an equal or slightly higher fraction of their debt contracted with those lenders than borrowers who were required to participate. [Merritt Hughes (202) 786-1892] **AO**

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Policy



Flexibility & the Farm Bill

Congress is examining alternatives to the present farm programs for the 1990 farm bill. It seeks to address both the costs of the programs and their rigidity while continuing to make agriculture more market-oriented. Planting flexibility is viewed favorably as an option by many Congressional members.

Since the debates for the 1990 farm bill began, a number of flexibility proposals has been introduced. These vary in terms of whether to tie the degree of flexibility to either something called the "farm acreage base," or a farm's "normal crop acreage."

Both the farm acreage base and the normal crop acreage base concepts include all of a farm's current crop base acres. The main difference is that a farm's normal crop acreage base would also include acres historically planted to soybeans plus most other oilseeds, while the farm acreage base would add only historic soybean acres.

The proposals also differ as to what share of the acreage base would be flexed, what could be planted on flexible acres, what benefits producers would be

Policy

eligible for on flexed acres, and how the benefits would be determined.

The Most Flexible Are...

The Administration's farm bill proposal is one of the most flexible. It allows farmers to plant any program crop, designated oilseed, or conserving use crop planted but not harvested on their farm's normal crop acreage, minus any acreage reduction program (ARP) acres. The proposal also has special provisions for planting other nonprogram or experimental crops.

Sen. Lugar (R-Ind.) incorporated the Administration's flexibility proposal in his Senate bill (S. 2292). His bill allows producers to receive full program benefits based on their normal crop acreage minus any ARP requirement. They may also plant permitted alternative nonprogram crops but would forego deficiency payments on these acres. Producers could still plant on ARP acres if they gave up one "payment" acre for each ARP acre planted to the original program crop.

Additional farm bill proposals containing flexibility options have been introduced in the Senate. Sen. J. Robert Kerry's (D-Neb.) bill, S. 2394, contains a normal crop acreage provision. Unlike the Administration's proposal, S. 2394 would pay on the basis of what was actually planted that year to program crops and oilseeds. Producers could plant nonprogram crops without losing historic base, but receive no payments.

No ARP is authorized in Sen. Rudy Boschwitz's (R-Minn.) bill, the Farm Flexibility Act of 1990 (S. 2251). As such, S. 2251 contains the greatest producer flexibility among currently proposed legislation. In Boschwitz's bill, a farm acreage base would include a newly created soybean base. A producer could grow any combination of crops as long as total plantings did not exceed the new base.

Deficiency payments under S. 2251 would be made on 1990 crop acreage base, regardless of the program crop or oilseed planted. Payments also would be made for planting conserving use crops as long as they were not harvested. No payments would be made for nonprogram crops, but producers would maintain base.

Other Bills Limit Flexibility

Many of the other bills limit the amount of either the farm acreage base or normal crop acreage that can be flexed to between 10 and 30 percent. They also limit benefits to program crops and oilseeds. Acreage planted to other nonprogram and alternative crops would be ineligible for deficiency payments.

The House version of the 1990 farm bill, H.R. 3950, was introduced by Rep. E. (Kika) de la Garza (D-Tex.). This bill serves as the mark-up vehicle for the House bill. H.R. 3950 would extend the flexibility options of statutes mandated this year.

Producers of 1990 program crops were allowed to plant oilseeds and alternative crops on up to 20 percent of the permitted program acreage. Producers planting these crops had to forego deficiency payments on the acreage planted on those acres, but maintained base history.

The current statutes also allow oats to be planted on other feed grains' base (excluding any portion designated to soybeans) without losing that base. Producers were then eligible for oat price supports.

Reps. Charles Stenholm (D-Tex.) and Pat Roberts (R-Kans.) reintroduced their triple base proposal, H.R. 2294, first introduced during the early debates for the 1985 farm bill. The triple base option would continue with the present crop base and permitted acreage (the crop acreage base minus any ARP requirement) concepts. It also would establish a third, "payment acreage" base.

The payment acreage base would be a percentage of the permitted acreage in

proportion to a 5-year average of the national acreage needed to meet domestic, export, and stock needs. The difference between the permitted and the payment acreage would be the flexible acreage on which producers would receive no program benefits. On this acreage, producers would be allowed to follow market signals and plant any program crop without losing base.

Stenholm and Roberts later introduced H.R. 4094, which amends existing flexibility authority in the 1985 Act. Under H.R. 4094, producers could plant program crops determined to be in short supply on any of their farm acreage base. Current law allows only oats to be planted under such conditions. These acres would be eligible for price support loans only and not deficiency payments, although base history would be preserved.

Oilseeds could be planted on up to 25 percent of permitted acres and would be eligible for oilseed price supports. Current authority for the 0/25 oilseed program applied only to the 1989 and 1990 crops.

The bill allows for a shift in a program crop's acreage base of up to 20 percent of the farm acreage base when the crop is not in short supply. However, the upward shift must be accompanied by an equal downward shift of another crop's base. The following year, the base reverts back to its historic crop. This provision may be suspended if the Secretary determined there was a short supply, or an emergency existed with respect to a program crop.

Current law gives the Secretary discretionary authority to allow for a shift of up to 10 percent of the farm acreage base; however, this provision has never been implemented.

Bills introduced by Sen. David Pryor (D-Ark.) and Rep. Jerry Huckaby (D-La.) also would allow shifts in producers' crop acreage bases. Pryor's proposal, S. 2367, provides for similar shifts in base as the Stenholm/Roberts bill, but these shifts would be limited to 10 percent and would only apply to cotton, rice, and oilseeds. Producers could plant on ARP

Policy

acres; however, eligible payment acres for a program crop would be decreased one-to-one for each acre planted over its permitted acres.

Huckaby's proposal, H.R. 4189, also allows for a 10-percent base shift. However, his proposal includes a "floating base" that allows the shift to become permanent after 3 consecutive years. Hence, H.R. 4189 is the only proposal that would allow producers to alter their bases permanently. All program crops planted would be eligible for price support payments even when planted on a shifted crop's base.

Bills introduced by Rep. Tim Johnson (D-S.D.), H.R. 4339, and Sen. Wyche Fowler (D-Ga.), S. 2315, would only permit oilseeds on flexed acres. Johnson's bill would allow oilseeds to be planted on up to 30 percent of an operator's farm acreage base. It establishes a price support loan of \$0.12 per pound. Fowler's bill limits flexed acres to 25 percent for soybeans. A soybean equity rate would be tied to corn or cotton target prices.

The House Agriculture Committee approved a 25-percent flexibility plan on May 23. The Senate Agriculture Committee approved a similar 25-percent flexibility plan on June 14.

Under the House's plan, which closely resembles triple base, producers could flex up to 25 percent of their flexible acreage base, defined as the sum of their farm acreage base plus historic oilseed plantings. These acres can be planted to program crops and oilseeds and would only be eligible for price support payments, not deficiency payments. Producers also would receive base protection for the original program crop.

Flexibility Is Not New

Planting flexibility will not be entirely new if included in the 1990 farm bill. Certain provisions, already part of law, allow for a degree of flexibility. Under the Food Security Act of 1985, producers are allowed to plant between 50 and 92 percent of their crop's permitted acreage when an ARP is in effect and devote the

rest to conserving uses or any approved nonprogram crop. They still would receive 92 percent of their deficiency payments.

Under the Food Security Improvement Act of 1986, this provision was amended to limit the nonprogram crops that could be planted to prevent adverse economic effects on farmers already growing nonprogram crops. The Farm Disaster Assistance Act of 1987 again modified the 50/92 provision to make a 0/92 provision an option. Under 0/92, producers could devote all their program crop acreage to conserving use and still receive 92 percent of their deficiency payments.

The Agricultural Reconciliation Act of 1987 made the 0/92 provision a program option for wheat and feed grain producers for their 1988-90 crops. Cotton and rice producers can sign up for the 50/92 provision under their programs.

Planting was made more flexible under the Disaster Assistance Act of 1988 in response to the low supply of domestically produced soybeans. The law allowed farmers to plant between 10 and 25 percent of their 1989 permitted program crop acreage to soybeans or sunflowers without affecting the producers' historic bases. The Secretary was given the authority to determine exactly how much acreage could be shifted.

Farmers who plant soybeans and sunflowers on program crop acreage cannot receive any program benefits on these acres other than soybean or sunflower seed price support loans and purchases. The law allowed for an expansion to the 1990 crop.

The Omnibus Budget Reconciliation Act of 1989 (P.L. 101-239) made the soybean and sunflower planting provision of the Disaster Assistance Act of 1988 mandatory for the 1990 crop year. P.L. 101-239 expanded the provision to allow program crop producers to plant up to 25 percent of their permitted acreage to soybeans, sunflowers, and safflowers for the 1990 crop. Nonetheless, the Secretary was allowed to scale back the acreage shift if warranted by market developments. [Susan Pollack and Lori Lynch (202) 786-1689] AO

Rural Development



Job Growth Moderates

Rural areas have recovered from the soaring unemployment rates and stagnant job growth of the early 1980's. Annual average unemployment rates in nonmetropolitan (non-metro) areas have declined fairly consistently since the 1980-82 recession. And, beginning in the last half of 1988, nonmetro employment growth rates have equaled or surpassed those of metro areas.

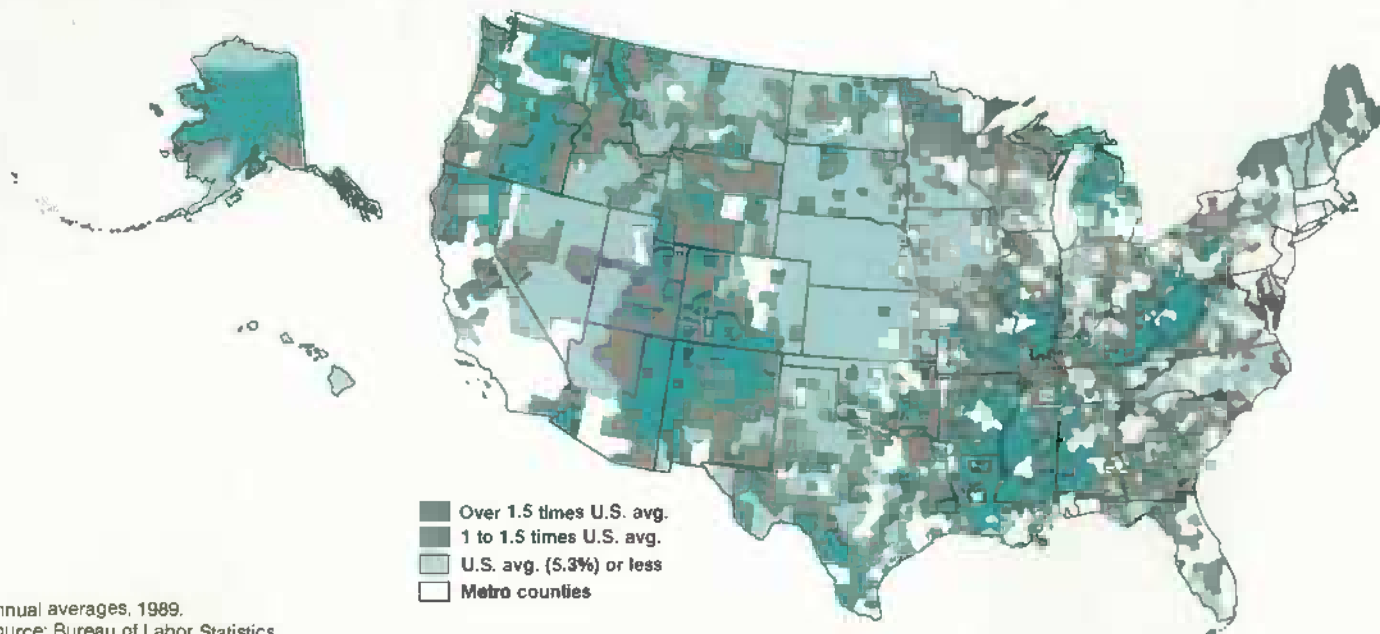
However, the most recent data point to moderating growth in rural and urban employment in the last quarter of 1989 and first quarter of 1990. This reflects recent declines in manufacturing jobs and a slowdown in the national economy that began in second-half 1989.

Current indicators do not point to a substantial weakening of the rural labor market. Nonetheless, rural areas are likely to see more moderate job growth and stable unemployment rates for the rest of this year.

Nonmetro employment conditions are increasingly important for farmers, as

Rural Development

High Unemployment Lingers in Many Nonmetro Areas



greater numbers of farm families turn to off-farm earnings to supplement farm income. According to the Census of Agriculture, over half of all farm operators held off-farm jobs in 1987. Farmers' success in finding adequate off-farm employment will depend in part on the health of the rural economy and the characteristics of the rural labor market.

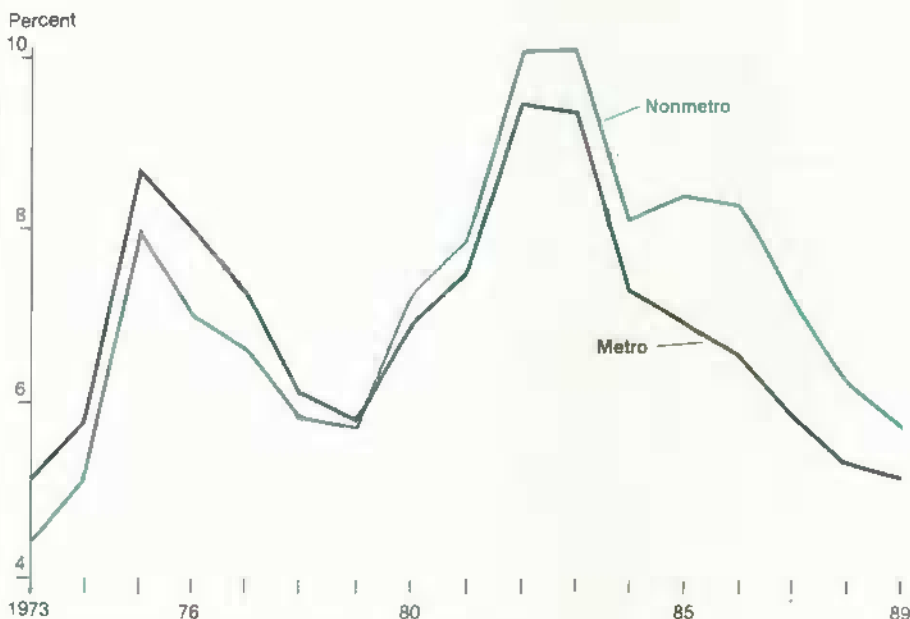
Rural Employment Grew Faster

Employment in nonmetro areas grew by almost 900,000 workers during 1989, up 3.7 percent, versus a 1.6-percent gain in metro employment. The rural advantage continued into the first part of 1990, marking the eighth straight quarter that nonmetro growth equaled or surpassed metro growth.

Rural areas were hit harder than urban areas by the 1980-82 recession and needed larger employment gains to return to prerecession conditions. However, these rural growth rates may be somewhat optimistic. Other data sources suggest that metro and nonmetro areas are growing at more equal rates.

Recent rural employment growth now reflects an expansion of the labor force

Nonmetro Unemployment Rate Falls, But Remains Above Metro Rate



as well as a rehiring of the unemployed. In 1989, nonmetro labor force participation rose to over 63 percent, the highest since data were first collected in 1973. The metro labor force participation rate also set a record at over 67 percent.

The nonmetro participation rate is below the metro rate largely because nonmetro areas have higher proportions of disabled and other individuals held out of the labor force due to family responsibilities. In 1989, 26.2 million people 16 years and older were in the rural labor force, accounting for about 21 percent of the

total U.S. labor force. Most of the recent growth in the nonmetro labor force was among whites, women, and workers aged 35-54.

Throughout this article, the terms "rural" and "nonmetro" are used interchangeably. They both refer to counties outside of metropolitan statistical areas (MSA's).

Rural Unemployment Rate Stabilizes

After declining for 4 years, the rural unemployment rate, at 6.6 percent, remained unchanged from a year earlier in the first quarter of 1990. This may mean that nonmetro unemployment rates are leveling off as rural areas complete their recovery. Or it may reflect the recent slowdown in the national economy.

Nonetheless, on an annual basis, average unemployment in rural areas has declined fairly consistently from its peak of 10.1 percent in 1982 and 1983. The jobless rate dropped from 6.2 percent in 1988 to 5.7 in 1989, the lowest in 10 years. But while the nonmetro annual unemployment rate has returned to pre-recession ranges, it remains higher than the metro rate (5.2 percent). Prior to the recession, rural rates were lower than urban rates.

Despite the declines in rural unemployment rates over the past several years, some population groups—particularly minorities and teenagers—continue to dominate the unemployment picture. In 1989, 15.3 percent of the teenagers, 12 percent of blacks, and 9.3 percent of Hispanics in rural areas were looking for work. Nonmetro black teenagers were particularly disadvantaged, with an unemployment rate of over 32 percent.

Rural Gains Are Uneven

While rural joblessness has declined overall, many pockets of high unemployment persist. Unemployment in nonmetro counties in 1989 ranged from 1.2 percent in Faulk County, S.D. to 34.5 percent in Starr County, Tex.

Some 900 counties (38 percent of all nonmetro counties) showed the brightest unemployment picture in 1989, with rates below the 5.3-percent U.S. average. These counties were spread throughout the Midwest, New England, the Mountain States of Nevada, Idaho, and Montana, and the Eastern Seaboard States of Virginia and North Carolina.

A large proportion of these low-unemployment counties are highly dependent on farming—and farming-dependent counties traditionally have had lower unemployment rates than other types of counties. However, despite their low unemployment rates, many of these agricultural counties have shown sizable population declines and little or no employment growth in recent years.

In contrast, over 600 counties (25 percent of all nonmetro counties) had unemployment rates above 8 percent, 1.5 times the national average in 1989. Some of these high-unemployment counties, particularly in Texas, Alaska, parts of the Southeast, and the Mississippi Delta, are dependent on natural gas and oil production.

While unemployment for most rural counties peaked during the 1980-82 recession, rates in energy-related counties crested in 1986 as oil prices and energy production fell. Most of these counties have seen some drop in unemployment since 1986, but rates remain high.

High unemployment rates in other nonmetro counties have been more persistent over time. The mining-dependent areas of Michigan, Oregon, and parts of Appalachia were particularly hard hit during the recession and have not yet fully recovered. They continue to have higher unemployment rates and slower employment growth than counties with other economic bases.

The manufacturing, timber, and resort areas of the Northern Pacific and Lake States have experienced persistently high

unemployment rates largely because they depend on seasonal employment.

Chronically high unemployment rates also typify the Indian reservations of the Northern Plains and Southwest, as well as areas in the Mississippi Delta and Southeastern States with predominantly poor Hispanic or black populations. Limited employment opportunities and work forces with low levels of education and training characterize many of these counties. [Leslie A. Whitener (202)

786-1540] AO

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Special Article

A Market-Oriented Stocks Proposal

The Administration's proposals for the 1990 farm bill would continue to reduce the role of government in grain markets, in line with the spirit of the 1985 Act. Fundamentally, the proposal recommends continuing the authority to keep loan rates below expected long-run market prices. Also, the proposal calls for more planting flexibility, less reliance on acreage reduction programs (ARP's), and a smaller, more market-oriented Farmer-Owned Reserve (FOR) stocks program. The Food Security Wheat Reserve of 4 million tons, mandated under current law, would remain unchanged.

In June, the House and Senate Agriculture Committees approved a farm bill including provisions for a FOR that are similar to the Administration's proposal.

With loan rates generally below market prices, according to the Administration's proposal, the grain markets would clear most years without farmers selling their crops to the Commodity Credit Corporation (CCC) by defaulting on nonrecourse loans. And total grain stocks would decline: the drop in government and subsidized stocks would outweigh a gain in private unsubsidized stocks.

The resulting lower total stocks would push down ARP requirements, because, according to the proposal, the ARP's would be linked to the ratio of carryover stocks to total use. This should lead to more reliance on the market and less on ARP's to balance supply and demand.

The Administration's proposal is explicit in expecting that "...ARP's are likely to be smaller in the 1990's because of the Conservation Reserve Program, growing domestic and export use, and more competitive pricing policies."

The proposal also calls for a smaller Farmer-Owned Reserve (FOR) that is less insulated from the market. The proposed FOR is a 9-12 month storage subsidy program, in contrast to the current FOR, which is a multiyear storage and interest rate subsidy program combined with a loan program.

Stocks would always be in release status under the proposed program, because release prices would be eliminated. Farmers would decide when to remove stocks from the reserve based on marketing opportunities. The government would have the authority to influence stockholding at the margin by changing storage subsidies. However, stocks would not be isolated from the marketplace.



The main features of the proposed FOR include:

- a contract of 9-12 months, beginning somewhat after the start of the marketing year;
- a maximum reserve of 300 million bushels for wheat and 600 million for feed grains, but no minimum levels;
- no link to a loan program, although grain under loan could be placed in the reserve;
- no price or quantity triggers for release or entry;
- storage payments to be made quarterly; and
- discretion to eliminate storage subsidy payments when prices reach 140 percent of the loan rate.

What's Behind Stocks Policies?

Why does the government own or subsidize stocks? Stock accumulations have often been an expensive byproduct of federal price supports. The supports are aimed at protecting farmers from low prices and promoting orderly grain marketing. Under these policies, farmers are guaranteed a minimum price. When market prices are below this minimum, participating farmers sell their grain to the government at an annually announced loan rate.

Aside from protecting farmers from low prices, government stocks can help stabilize prices in the short run. Free market participants consider only expected future profits when deciding to hold stocks. So, without government stocks, an unexpected event which cut output (such as a drought) would increase prices more sharply in the short term because private stock levels would be smaller.

Government purchases and stockholding when prices are low, and sales when prices move up, can smooth out such price volatility without affecting average prices over the long run. This type of policy can cut consumer and producer risks. The question is, does society value price stability more than the free market? Research on this question has been inconclusive.

Historically, though, price-support policies often resulted in large accumulations of government stocks. As a result, a number of surplus-disposal schemes were put in place, and ARP's were used to limit output. Loan rates were lowered, while the disposal mechanisms put downward pressure on world prices.

Following the world grain shortages of the mid-1970's, interest in stocks focused more on their role as a buffer against tight food supplies. The FOR now in place was designed with this role in mind. It provides farmers benefits from holding stocks over a number of years while serving as a buffer against a possible future production shortfall. Such a shortfall would push up market prices to the FOR-release prices, and then the stocks would move onto the market.

How Would the FOR Work?

Grain Release Procedure.—Because the proposed FOR would always be in release status, FOR stocks would be more readily accessible to the marketplace than under the current FOR, and not isolated because of high release prices. Farmers would decide when to remove stocks from the reserve based on the economic incentives of the marketplace.

Contract Length.

The proposed FOR contract length is 9-12 months because stocks and annual ARP's are viewed as complements in adapting market supplies to demand. Land idled under ARP's represents unused capacity that can be brought back into production the following year if supplies are tight. Further, the increased planting flexibility also proposed by the Administration would attract additional land to those crops that were in relatively short supply (see the articles on flexibility in this issue and the March AO).

These features would enable production to rebound in the year following a shortfall, thereby reducing the need for a larger multiyear FOR. Thus, the purpose of reserves would be to supplement production in a short-crop year, bridging the production gap until land previously idled under the ARP's—and potentially land from other crops—is planted in the following year.

FOR Ceiling.—The Administration's proposal calls for a maximum of 300 million bushels in the wheat FOR and 600 million in the feed grain FOR. This places an upper limit on the total cost of the program. These ceilings are less than those implied by the 1985 Act, and less than the average FOR stocks during 1979-89. Under the 1985 Act, ceilings are 30 percent of use for wheat and 15 percent of use for feed grains.

Consequently, government distortion of the marketplace and budget costs would be smaller, but there would also be less protection against sharp price spikes for grain consumers in a severe-drought year. Nonetheless, by abolishing release prices, the new FOR would smooth out price volatility in a more normal year. Since midyear stocks of grain held on farms are typically well above the proposed maximum FOR levels, limited entry rules probably would always be needed.

Moreover, unless the storage subsidy is large and market prices are low, net increases in total private stocks due to the program will be smaller than the proposed FOR ceilings. Some of the grain placed in the FOR would have been held anyway.

FOR Stocks Would Drop

	Average FOR stocks 1979-89	Projected FOR stocks 1989/90	Ceilings	
			Average 1986-89 FOR*	Proposed FOR
Million bushels				
Wheat	510	144	791	300
Feed grains	1,051	403	1,539	600

*Based on the Food Security Act of 1985, the maximum wheat level is 30 percent of total use, plus 10 percent additional at the discretion of the Secretary. For feed grains, the maximum is 15 percent of use, plus 10 percent discretionary.

Storage Payments.

The proposal calls for fixed storage payments, paid quarterly. The Secretary of Agriculture would have the authority to stop storage payments if prices were above 140 percent of the loan rate. Thus, the major storage payment features relate

to the payment rate, the timing of payments, and rules for terminating payments. The fixed storage payment proposal is similar to the current payment procedure.

The basic loan rates would be 75-85 percent of a moving average of annual average market prices for the past 5 years (dropping the highest and lowest years). But loan rates would not be allowed to drop more than 5 percent per year. The option to stop FOR storage payments implies that storage subsidies could be eliminated in the long run when market prices were more than 105-119 percent of the 5-year moving average, if Findley adjustments were discontinued—or above 84-95 percent of the

Special Article

Higher Storage Subsidies Would Mean Larger Total Stock Increases*

Storage subsidy	Wheat	Corn
	Gain in total stocks as percent of FOR ceilings	
\$/bushel:		
.10	3	9
.30	10	25
.50	20	39

*Assuming prices of \$3.00 per bushel for wheat and \$2.00 per bushel for corn, and a FOR ceiling of 300 million bushels for wheat and 600 million bushels for corn.

5-year average, if Findley adjustments were continued. The Findley adjustments give the Secretary the additional option of cutting loan rates up to 20 percent for any given year.

The Bottom Line: Smaller Stocks

The amount added to total private stocks in any year due to the proposed FOR would depend on: the current market price, expected future prices, storage costs, the storage subsidy rate, and the maximum stocks allowed into the FOR. Research shows that the impacts of storage subsidies on stocks are larger when prices are lower and per-bushel subsidies are larger.

Compared with not having a FOR, the FOR with a proposed cap of 300 million bushels for wheat would increase total private wheat stocks by as much as 300 million bushels, assuming low prices (\$2.50/bu.) and high storage subsidies (\$.50/bu.). But with high prices (\$4.50/bu.) and low subsidies (\$.10/bu.), stocks would go up as little as 4 million bushels.

For corn, the changes would range from a high of 282 million bushels with a \$1.50/bu. price and a \$0.50 subsidy, to a low of 21 million bushels with a \$4.00 price and \$0.10 subsidy. These estimates assume that expected future prices are an average of the current and the previous 2-years' annual prices.

Compared to the current FOR, the proposed FOR would lead to lower total ending stocks. The current FOR requires a minimum FOR carryover of 300 million bushels of wheat and 450 million of feed grains, but the proposed FOR would have no minimums—only ceilings. Under the proposed FOR, the probability of tight grain stocks would be somewhat higher. However, there is a chance that the CCC would occasionally end up with more stocks, because some farmers could be kept out of the FOR by the ceilings. This would happen if prices trended sharply down in the near term.

The proposed FOR is expected to reduce government costs because a smaller quantity of grain storage would be subsidized, and because of the option that payments may be stopped when the market price exceeds 140 percent of the loan rate. Administering the proposed program should be simpler because there would be fewer rules. Depending upon the amount of discretion given the Secretary, market uncertainty generated by government management of the program would be reduced.

Although some increase in privately held grain stocks would be expected in response to the FOR proposal, the net result over several years would be to reduce average total U.S. stock levels. Lower grain stocks likely would boost price volatility within a severe-drought year.

But the increased planting flexibility would dampen volatility over the long term, as farmers changed what they planted in response to price signals. Nonetheless, FOR stocks would be more available to the market than they are now, so moderate price runups due to relatively small market imbalances would be dampened in the short run. [Harry Baumes, Fred Nelson, J. Michael Price, Robert Reinsel, Jerry Sharples, and Paul Westcott (202) 786-1689] **AO**

Grains: The Global Outlook

World production of coarse grains and wheat combined in 1990/91 is projected to outpace consumption and permit a slight increase in stocks. This would be the first such increase in 4 years.

However, wheat is expected to account for all the gain in stocks as world coarse grain use again outstrips production. Global coarse grain stocks are expected to continue down for the fourth consecutive year.

Prices in world grain markets in recent weeks reflect expectations of more abundant wheat supplies and tighter coarse grain supplies: wheat prices have been falling while corn prices have been moving up. The divergent outlook marks a reversal of the situation a year ago when wheat was becoming more scarce.

Wheat Supplies To Rise

World coarse grain and wheat stocks were record high in 1986/87, but have fallen dramatically since then. In 1989/90, global ending stocks are forecast to be 44 percent below their peak.

Much of the drawdown has occurred in the U.S., although foreign ending stocks also have fallen since 1986/87. In the U.S., government programs led to a decline in grain area and then drought lowered production. This is reducing 1989/90 U.S. grain ending stocks to the lowest since 1975/76. Competitor production during the mid-1980's also declined as area fell in response to low world prices. Many competitors also experienced adverse weather.

By 1988/89, concern about burdensome supplies began to shift to worries about adequacy. Exporting countries were able to continue supplying the world market only by drawing down stocks.

Going into 1990/91, there are signs of a small turnaround for wheat, while coarse grain supplies are expected to tighten a bit further. For the first time since 1987/88, wheat production is projected to exceed consumption, leading to a modest recovery in global stocks. Wheat prices are expected to decline, and world trade is forecast to increase. More wheat will be traded to feed livestock.



While coarse grain stocks are expected to fall again in 1990/91, the gap between production and use is likely to narrow considerably. Global coarse grain consumption is not projected to rise because some lower priced wheat will replace coarse grains in livestock rations.

Wheat Competition To Stiffen

Although U.S. wheat stocks continued to fall in 1989/90, foreign supplies began to recover. While beginning world stocks in 1990/91 are the lowest since 1981/82, wheat area and yields are forecast to rise in both importing and exporting countries. Last year's relatively high prices, government policies, and favorable weather are contributing to forecast production gains in several of the major exporting countries, as well as several large importing countries, including the USSR and China.

Global wheat consumption is forecast up 3 percent, slightly below the 30-year trend. While population growth and rising incomes account for much of the increase, a projected 10-percent rise in the use of wheat for feed also is contributing to the 1990/91 gain.

World trade is projected up 4 percent to 101 million tons, despite a favorable production outlook for several major importers. The main reason for the rise is the larger imports of wheat for feeding. However, the big U.S. crop, and the largest production since 1984/85 in the competing exporting countries, mean more competition and lower wheat export prices.

U.S. wheat exports in 1990/91 (July/June) are projected to be 34 million tons, down 1 percent from 1989/90. Moreover, the U.S.

Special Article

market share could slip to 34 percent from 35 a year earlier. Two main factors account for the decline.

First, major competitors will have greater exportable supplies because of larger crops. Their harvested area is likely to go up because of favorable weather across much of Northern Europe, improved moisture conditions in the Canadian spring wheat areas, and good planting conditions in Argentina and parts of Australia.

Second, the anticipated increase in world trade is based largely on increased imports of wheat for feeding. Trade in bread-quality wheat is expected to remain virtually unchanged because of projected large crops in a number of importing countries. Yet, the U.S. generally exports milling quality wheat. Competitors, especially the EC, have historically been the major suppliers of wheat for feeding and probably will be the beneficiaries of increased trade in the coming year.

Record EC Wheat Exports Foreseen

EC wheat production is forecast to be the second highest ever, although adverse weather in Southern Europe will keep harvested area below 1989/90. Overall, EC yields are projected up 6 percent. The yield gains will be most notable in France and the United Kingdom, where many farmers shifted from premium-quality bread wheat varieties to the higher yielding, lower protein varieties that are more suitable for feed.

Increased production of lower quality wheat probably will have major consequences for both the export and domestic feed markets. USDA projects that EC exports will be a record-breaking 22 million tons. And, unlike the last 2 years, a significant portion probably will be feed wheat, despite expectations of more wheat feeding within the EC.

Of all U.S. competitors, Canada is forecast to expand production the most in 1990/91. Canadian wheat farmers face few production alternatives. And planting conditions are better than last year, accounting for much of the forecast area increase. In addition, wheat prices, while below 1989/90, are still expected to be favorable relative to other crops. Increased output probably will lead to gains in both exports and ending stocks.

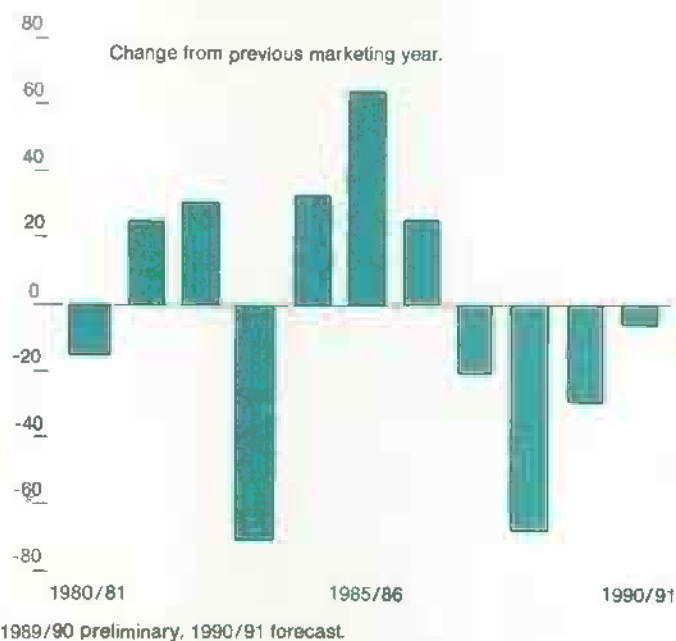
Several indicators point to larger area in Australia, although output there is forecast down from 1989/90 because of anticipated lower yields. Sheep production competes with wheat for land in Australia. But recently, wool prices dropped sharply and Australian wool stocks increased.

Even though world wheat prices are likely to fall in 1990/91, the relative change in prices between wheat and wool is making wheat more attractive to some producers. Moreover, depreciation of the Australian dollar likely will cushion Australian producers from the slide in prices.

World Wheat Stocks Expected To Rise



As Coarse Grain Stocks Decline



In Argentina, production is forecast to go up, although uncertainty about area there is much more acute. Hyperinflation reduced Argentine farmers' access to credit and use of inputs. Nonetheless, inflation recently slowed, and farmers' ability to buy inputs could improve.

Further, the Argentine government announced a reduction in export taxes on grain in May, hoping to boost plantings. However, export taxes rose last year at harvest, despite earlier promised reductions. It is unclear whether this year's announced cut in the tax rate will be enough to encourage farmers to expand area.

Despite these uncertainties, many Argentine farmers, especially those who double-crop soybeans, probably need the income that wheat provides and likely will plant as much or more wheat than a year ago.

Price Signals Favor Wheat for Livestock

In recent months, corn export prices have been creeping upward while wheat prices have begun to slide. Wheat export prices stayed high through much of 1989/90, largely because U.S. production lagged when drought spread through the Southern Plains. Since March, however, prospects for an abundant 1990/91 winter wheat harvest in the U.S., Northern Europe, the USSR, and China have contributed to a sharp price decline.

Competition to sell old-crop wheat became acute as many importers waited for the 1990/91 harvest to push prices down even more. Prices of new-crop wheat continued to fall as the harvest of the large winter wheat crops approached.

For corn, USDA has tightened estimates of U.S. ending stocks as demand surged. Strong demand and falling stocks have been pushing prices higher. While U.S. wheat generally does not compete with corn for export markets, some new-crop U.S. wheat reportedly has been sold for less than corn.

In 1986/87 and 1987/88, when supplies were abundant and wheat was priced more competitively with corn, world wheat feeding and trade in feed-quality wheat rose. Since then, both have declined as wheat prices increased.

In the past, when the wheat-to-corn price ratio was low, several importers—particularly the Soviet Union, South Korea, and Eastern Europe—substituted feed wheat for coarse grain imports. Historically, the Soviet Union, the EC, Eastern Europe, the U.S., and Canada have accounted for more than 90 percent of global wheat feeding.

Global Coarse Grain Stocks To Drop

The U.S. will account for most of the nearly 3-percent forecast gain in global coarse grain production in 1990/91. Foreign production also is projected to rise slightly, due to higher yields and increased area. Among individual countries, no major swings in production are anticipated.

In 1990/91, foreign use of coarse grains is projected to drop less than 1 percent, but this would be the first decline since 1985/86. The key reason for the potential decline is the probable change in livestock rations. However, the decline is expected to be offset by a small increase in U.S. use, leaving global consumption unchanged, and matching the forecast record for 1989/90.

As the largest producer, consumer, and stockholder, the U.S. dominates the world coarse grain market. To a greater degree than wheat, the drop in U.S. coarse grain supplies resulting from the 1988 drought played the pivotal role in reducing world stocks. U.S. coarse grain production dropped 31 percent in 1988/89, and led to a record reduction in U.S. and world carryover stocks.

World Wheat Output To Jump 6 Percent, Coarse Grains To Move Up Nearly 3 Percent

	1988/89 P	1989/90 F	1990/91 F
Million metric tons			
Wheat			
Argentina	8.4	10.2	11.5
Australia	14.1	14.7	14.5
Canada	16.0	24.4	26.5
China	85.4	90.8	93.0
Eastern Europe	44.8	42.2	43.0
EC	74.7	78.6	80.8
Soviet Union	84.4	90.5	95.0
U.S.	49.3	55.4	73.2
Others	123.7	128.0	130.7
Total	500.8	534.8	568.2
Coarse grains			
Argentina	7.3	8.3	9.5
Australia	6.7	6.9	6.5
Canada	19.7	23.5	23.8
China	94.2	94.6	96.4
Eastern Europe	59.5	66.7	67.4
EC	88.1	81.7	79.6
South Africa	13.0	9.3	9.3
Soviet Union	97.5	107.0	106.5
Thailand	4.4	4.2	4.3
U.S.	149.7	221.4	237.7
Others	188.5	176.1	179.5
Total	728.6	799.7	820.5

P=preliminary. F=forecast.

In 1989/90, world consumption of coarse grains began to pick up, mainly due to a rebound in the U.S. However, foreign developments also contributed to some tightening of supplies. Foreign coarse grain stocks, although much smaller than in the U.S., also have been declining in recent years. Since the mid-1980's, foreign use has been expanding modestly while foreign production has been fairly flat. In 1989/90, foreign ending stocks are expected to fall 12 percent.

World trade in coarse grains is projected down about 6 percent in 1990/91. This outlook marks a break from the strong growth in the previous 2 years.

World coarse grain trade rose 14 percent in 1988/89 because of a sharp upturn in Soviet demand. This was largely in response to tight global wheat supplies that year, and reduced Soviet imports of wheat for feed. A fall in Soviet wheat imports, some of which were used for feed, accounted for three-quarters of the 8-million-ton drop in world wheat trade in 1988/89.

Coarse grain trade probably is rising another 7 percent in 1989/90 to 101 million tons, the second highest on record. This reflects continued large Soviet imports and higher imports by

Special Article

Grain Trade: Wheat Up, Coarse Grains To Slip*

	1988/89	1989/90 P	1990/91 F
<i>Million metric tons</i>			
Wheat			
Major exporters			
Argentina	3.5	6.0	6.7
Australia	10.8	10.7	11.0
Canada	13.5	16.5	19.0
EC	21.0	21.0	22.0
Subtotal	48.8	54.2	58.7
U.S.	37.6	34.5	34.0
Major Importers			
China	15.5	13.5	13.5
Eastern Europe	2.8	2.2	2.8
Egypt	7.0	7.0	7.0
Japan	5.4	5.4	5.4
Iran	3.2	5.0	4.5
South Korea	2.8	2.2	3.2
Soviet Union	15.5	14.0	16.0
Others	44.7	47.6	48.6
Total	96.9	96.9	101.0
Coarse grains			
Major exporters			
Argentina	3.5	3.6	4.9
Australia	1.9	2.2	1.7
Canada	4.4	4.7	4.7
China	4.9	2.8	2.8
EC	10.8	11.3	10.5
South Africa	2.0	3.5	1.5
Thailand	1.4	1.3	1.0
Subtotal	28.9	29.3	27.1
U.S.	61.3	69.0	64.5
Major Importers			
Eastern Europe	5.0	6.0	4.0
Japan	21.5	21.7	21.6
Mexico	5.5	6.9	6.3
Saudi Arabia	5.4	4.3	4.6
South Korea	6.4	7.0	7.2
Soviet Union	22.5	23.5	19.9
Taiwan	4.7	5.4	5.0
Others	23.5	26.7	26.5
Total	94.5	101.5	95.1

*July/June for wheat, and Oct./Sept. for coarse grains. P=preliminary. F=forecast.

several other countries and regions, including Mexico, Taiwan, Turkey, and Eastern Europe.

Competitor Coarse Grain Exports Stagnate

Unlike wheat, coarse grain exports by competing suppliers have been trending down in recent years, and a further drop is projected in 1990/91. With larger U.S. shipments and stagnant com-

petitor sales, the U.S. share of the world coarse grain market has been growing impressively.

In 1989/90 (October/September), U.S. exports are forecast to reach 69 million tons, the highest since 1980/81. This would give the U.S. a 68-percent share of the world market, the second highest on record.

While U.S. exports are projected to decline to 64.5 million tons in 1990/91, the U.S. market share likely will remain firm because competitor exports also are forecast to slip.

All of the drop in U.S. exports is expected to be corn, with no change in sorghum and barley. Competitor exports of corn and barley are projected down in 1990/91, but their sorghum exports are expected to rise.

Argentine coarse grain exports have fallen in recent years, reflecting weather problems and because some farmers switched to oilseeds. Argentina's exports would have fallen further, but a severe economic crisis curbed domestic demand. Argentina's corn exports in 1990/91 are projected to rise 40 percent based on a forecast production increase. The slippage in Argentina's corn area may have bottomed out.

A declining trend in Thailand's corn exports reflects strong growth in domestic feed use and a decline in area. Another slight drop is projected in 1990/91 shipments. No significant change is expected in South African production, but its corn exports likely will drop in 1990/91 due to lower carryover stocks. South Africa's corn area is trending down, reflecting policies to reduce export subsidies.

China's corn exports are projected to be unchanged in 1990/91, after dropping since 1985/86. Stronger domestic demand accounts for much of the decline, but transportation difficulties continue to hamper grain distribution. Exports from China's surplus regions are attractive to the government because the country needs foreign exchange earnings.

Corn exports from the EC probably will drop in 1990/91 because of a projected decline in production. Dry conditions in France hampered corn planting. A slight fall in EC barley output is also likely as area slips, but exports are expected to stay high at 9 million tons.

Canada's 1990/91 barley crop is projected up about 7 percent, but exports probably will be flat. Australia's barley exports are likely to decline nearly 30 percent in 1990/91, while its sorghum exports will rise marginally.

Little Surplus To Absorb Shocks

The large stock drawdown of the late 1980's prevented a decline in world grain consumption. However, the ratio of wheat and coarse grain stocks to use has fallen dramatically, from 30.9 percent in 1986/87 to a forecast 16.7 in 1989/90. This would be the lowest since the early 1970's and shows that supplies are tight relative to consumption. In 1990/91, the ratio is projected to edge up to 17.1 percent.


During the coming year, wheat and coarse grain stocks will not provide a cushion for any sudden shortfalls as they did in the recent drought years. For wheat, a significant portion of 1990/91 production is already assured, with prospects generally favorable for the U.S. and other Northern Hemisphere winter wheat crops now being harvested. The U.S. crop is forecast to be the third highest ever.

However, while early projections for many major spring wheat and Southern Hemisphere producers are also up, a serious shortfall, especially in Canada or the USSR, would shift the global forecast from one of modest recovery to one of very tight supplies and higher prices.

For coarse grains, there is more vulnerability to a weather-induced shock because most of the significant producers have just planted. The U.S. situation will be the most critical, although crop prospects to date have been generally favorable.

Sudden changes in import demand also would contribute to a further tightening—or easing—of supplies. The Soviet Union and China generally account for about 25 percent of world wheat and coarse grain imports. Not only are they the largest importers, but they are also the source of major market swings. In 1990/91, the two countries are forecast to account for 28 percent of world wheat imports and 22 percent of coarse grain imports.

Yet, both countries face serious financial constraints. In China, strong consumer demand must be balanced against limited access to foreign exchange. In the Soviet Union, political pressure to reduce wheat imports and increase self-sufficiency might prevent an expansion of wheat imports, even for feed. However, internal pressure to increase meat production is likely to outweigh the desire to curb imports.

Both countries are forecast to produce large wheat and coarse grain crops. China's grain crop is projected to set a record in 1990/91. Early projections for the USSR are favorable, with a 215-million-ton total grain crop. However, the ability of both governments to procure enough domestic grain for urban consumers and livestock operations has been a problem and will be a critical factor in determining 1990/91 imports. [Sara Schwartz and Pete Riley (202) 786-1824] 

Upcoming Releases From the Agricultural Statistics Board

The following list gives the release dates of Agricultural Statistics Board reports that will be issued by the time the next *Agricultural Outlook* comes off press.

July

- 3 Egg Products
Farm Production **Expenditures** 1989-Preliminary
- 6 Celery
Dairy Products
Poultry Slaughter
- 10 Noncitrus Fruits & Nuts--Midyear Supplement
- 12 Crop Production
- 13 Milk Production
Turkey Hatchery
- 18 Vegetables
- 20 Catfish
Cattle on Feed
Cold Storage
Livestock Slaughter
- 23 Mink
- 25 Eggs, Chickens, & Turkeys
- 27 Cattle
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Catfish Production

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Statistical Indicators

Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1989				1990				
	II	III	IV	Annual	I	II,F	III F	IV,F	Annual F
Prices received by farmers (1977=100)									
Livestock & products	148	145	147	147	152	147	143	139	148
Crops	156	159	166	160	171	166	181	158	163
	140	130	128	134	132	128	125	122	127
Prices paid by farmers, (1977=100)									
Production items	166	166	165	165	168	169	—	—	169
Commodities & services, interest, taxes, & wages	177	178	178	177	181	183	—	—	182
Cash receipts (\$ bil.) 1/	181	184	155	158	171	169	171	148	162-168
Livestock (\$ bil.)	82	82	88	84	94	84	82	81	84-87
Crops (\$ bil.)	79	82	67	74	76	85	89	66	77-81
Market basket (1982-84=100)									
Retail cost	124	125	127	125	133	—	—	—	—
Farm value	108	107	108	107	118	—	—	—	—
Spread	133	135	137	134	141	—	—	—	—
Farm value/retail cost (%)	30	30	30	30	31	—	—	—	—
Retail prices (1982-84=100)									
Food	125	126	127	125	131	131	—	—	—
At home	124	125	128	124	132	131	—	—	—
Away from home	127	128	130	127	131	132	—	—	—
Agricultural exports (\$ bil.) 2/	9.8	8.8	10.6	39.7	10.3	8.8	8.8	—	40.0
Agricultural imports (\$ bil.) 2/	5.5	5.0	6.4	21.5	5.9	5.4	4.8	—	22.0
Commercial production									
Red meat (mil. lb.)	9,871	9,848	10,105	39,418	9,581	9,602	9,780	10,138	39,101
Poultry (mil. lb.)	5,538	5,704	5,727	22,039	5,811	5,945	6,075	8,035	23,668
Eggs (mil. doz.)	1,394	1,389	1,415	5,587	1,390	1,410	1,410	1,450	5,660
Milk (bil. lb.)	37.7	35.2	34.9	144.3	36.9	38.5	36.3	35.7	147.4
Consumption, per capita									
Red meat and poultry (lb.)	54.6	55.4	57.6	220.5	53.4	54.6	55.5	58.2	221.8
Corn beginning stocks (mil. bu.) 3/	5,203.9	3,419.0	1,930.0	4,259.1	7,079.2	4,813.0	2,896.5	—	1,930.4
Corn use (mil. bu.) 3/	1,785.8	1,489.3	2,378.1	7,260.2	2,287.0	1,918.8	—	—	—
Prices 4/									
Choice steers—Omaha (\$/cwt)	73.85	70.09	72.46	72.52	77.20	77-78	69-75	71-77	73-77
Barrows & gilts—7 mths. (\$/cwt)	41.84	46.07	47.42	44.03	49.45	60-61	60-66	48-54	54-58
Broilers—12-city (cts./lb.)	67.1	59.7	49.8	59.0	56.5	56-57	55-61	46-52	53-57
Eggs—NY gr. A large (cts./doz.)	75.2	81.5	92.6	81.9	87.8	74-75	63-69	63-69	72-76
Milk—all at plant (\$/cwt)	12.27	13.27	15.47	13.56	14.87	13.25-13.55	13.20-14.20	14.00-15.00	13.80-14.40
Wheat—KC HAW ordinary (\$/bu.)	4.44	4.31	4.34	4.35	4.16	—	—	—	—
Corn—Chicago (\$/bu.)	2.76	2.49	2.36	2.55	2.42	—	—	—	—
Soybeans—Chicago (\$/bu.)	7.39	6.71	5.70	6.70	5.70	—	—	—	—
Cotton—Avg. spot mkt. (cts./lb.)	63.1	66.6	67.1	63.7	65.1	—	—	—	—
	1983	1984	1985	1986	1987	1988	1989	1990 F	1991 F
Gross cash income (\$ bil.)	150.4	155.3	156.9	152.5	162.0	171.6	175	176-183	—
Gross cash expenses (\$ bil.)	113.5	116.6	110.2	100.7	107.5	114.4	121	121-124	—
Net cash income (\$ bil.)	36.9	38.7	46.7	51.8	54.5	57.2	54	55-59	—
Net farm income (\$ bil.)	12.7	32.2	32.4	38.0	43.6	42.7	49	47-51	—
Farm real estate values 5/									
Nominal (\$ per acre)	788	801	713	640	599	632	667	693	714-721
Real (1977 \$)	472	459	395	348	317	322	325	322	317-320

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Dec-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; Sept.-Aug. annual. Use includes exports & domestic disappearance. 4/ Simple averages. 5/ 1990-91 values as of January 1. 1986-89 values as of February 1. 1982-85 values as of April 1. F = forecast, — = not available.

U.S. and Foreign Economic Data

Table 2.—U.S. Gross National Product & Related Data

	Annual			1989				1990
	1987	1988	1989	I	II	III	IV	I P
\$ billion (quarterly data seasonally adjusted at annual rates)								
Gross national product	4,524.3	4,880.8	5,234.0	5,113.1	5,201.7	5,281.0	5,340.2	5,431.4
Personal consumption expenditures	3,010.8	3,235.1	3,471.1	3,381.4	3,444.1	3,508.1	3,550.6	3,639.0
Durable goods	421.0	455.2	473.2	466.4	471.0	486.1	489.5	491.3
Nondurable goods	998.1	1,052.3	1,123.4	1,098.3	1,121.5	1,131.4	1,142.4	1,169.3
Clothing & shoes	177.2	186.8	200.1	195.0	198.9	202.2	204.3	209.0
Food & beverages	529.2	559.7	594.9	587.3	592.2	598.1	601.8	618.8
Services	1,591.7	1,727.8	1,874.4	1,816.7	1,851.7	1,890.6	1,938.7	1,978.4
Gross private domestic investment	899.9	750.3	773.4	769.6	775.0	779.1	770.1	751.1
Fixed investment	670.6	719.6	746.3	742.0	747.6	751.7	744.0	764.0
Change in business inventories	29.3	30.6	27.1	27.7	27.4	27.4	26.1	-12.9
Net exports of goods & services	-112.8	-73.7	-47.1	-54.0	-50.6	-45.1	-38.8	-40.8
Government purchases of goods & services	926.1	968.9	1,036.6	1,016.0	1,033.2	1,038.9	1,058.3	1,080.6
1982 \$ billion (quarterly data seasonally adjusted at annual rates)								
Gross national product	3,853.7	4,024.4	4,144.1	4,106.8	4,132.5	4,182.9	4,174.1	4,188.0
Personal consumption expenditures	2,513.7	2,598.4	2,669.8	2,641.0	2,653.7	2,690.1	2,693.7	2,709.6
Durable goods	389.8	413.6	425.2	419.3	424.9	436.4	420.3	435.6
Nondurable goods	890.4	904.5	918.7	915.0	908.7	920.8	921.1	914.0
Clothing & shoes	159.8	181.3	168.9	165.0	165.8	173.3	171.5	171.3
Food & beverages	452.7	480.0	462.8	466.0	461.4	463.2	460.5	458.4
Services	1,233.7	1,280.2	1,327.7	1,306.7	1,319.0	1,332.9	1,352.2	1,360.0
Gross private domestic investment	674.0	715.8	720.7	721.1	719.8	724.6	717.3	702.1
Fixed investment	650.3	687.9	698.8	696.6	700.7	702.7	695.1	707.9
Change in business inventories	23.7	27.9	21.9	24.5	19.1	21.9	22.2	-5.9
Net exports of goods & services	-115.7	-74.9	-52.6	-55.0	-51.2	-57.1	-47.2	-40.4
Government purchases of goods & services	781.8	785.1	806.4	799.7	810.3	805.3	810.4	816.7
GNP implicit price deflator (% change)	3.2	3.3	4.1	4.0	4.6	3.2	3.2	5.7
Disposable personal income (\$ bil.)	3,205.9	3,477.8	3,778.8	3,689.5	3,747.7	3,806.8	3,871.3	3,965.7
Disposable per. income (1982 \$ bil.)	2,678.6	2,793.2	2,906.3	2,881.7	2,887.6	2,919.2	2,936.9	2,953.0
Per capita disposable per. income (\$)	13,140	14,116	15,186	14,884	15,084	15,280	15,495	15,837
Per capita dis. per. income (1982 \$)	10,970	11,337	11,680	11,625	11,622	11,717	11,765	11,793
U.S. population, total, incl. military abroad (mil.)	243.9	246.4	248.8	247.9	248.4	249.1	249.8	250.4
Civilian population (mil.)	241.7	244.1	246.6	245.7	246.2	246.9	247.6	248.2
	Annual			1989	1990			
	1987	1988	1989	Apr	Jan	Feb	Mar	Apr
Industrial production (1987=100)	100.0	105.4	108.1	108.6	107.5	108.5	109.1	108.7
Leading economic indicators (1982=100)	140.1	142.8	144.9	145.8	145.3	143.8	145.2	144.9
Civilian employment (mil. persons)	112.4	115.0	117.3	117.1	117.9	118.0	118.3	118.1
Civilian unemployment rate (%)	6.1	5.4	5.2	5.2	5.2	5.2	5.1	5.3
Personal income (\$ bil. annual rate)	3,777.8	4,064.5	4,427.3	4,387.1	4,602.9	4,637.8	4,673.8	4,687.8
Money stock—M2 (daily avg.) (\$ bil.) 1/	2,913.2	3,072.4	3,221.0	3,089.4	3,229.3	3,252.4	3,266.2	3,272.6
Three-month Treasury bill rate (%)	5.82	6.89	8.12	8.70	7.64	7.76	7.87	7.78
AAA corporate bond yield (Moody's) (%)	9.38	9.71	9.28	9.79	8.99	9.22	9.37	9.45
Housing starts (1,000) 2/	1,821	1,488	1,376	1,341	1,568	1,488	1,321	1,245
Auto sales at retail, total (mil.)	10.3	10.8	9.9	10.8	10.2	9.5	9.5	9.6
Business inventory/sales ratio	1.51	1.49	1.50	1.48	1.51	1.48	1.50	—
Sales of oil retail stores (\$ bil.)	128.5	137.5	144.5	143.7	149.9	149.9	149.5 P	148.8
Nondurable goods stores (\$ bil.)	80.5	85.2	90.7	89.8	93.7	94.9	94.9 P	94.8
Food stores (\$ bil.)	25.8	27.2	29.1	28.8	29.9	30.3	30.3 P	30.7
Eating & drinking places (\$ bil.)	12.8	13.8	14.5	14.4	14.8	15.2	15.3 P	15.2
Apparel & accessory stores (\$ bil.)	6.6	7.1	7.6	7.6	7.7	7.8	7.9 P	7.8

1/ Annual data as of December of the year listed. 2/ Private, including farm. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 786-3313.

Table 3.—Foreign Economic Growth, Inflation, & Export Earnings

	1981	1982	1983	1984	1985	1986	1987	1988	1989 P	1990 F	1991 F	Average 1980-89
Annual percent change												
World, less U.S.												
Real GDP	1.5	1.0	1.8	4.3	3.5	3.1	3.7	3.7	2.6	2.3	3.1	2.6
Consumer prices	15.6	14.5	15.6	12.5	12.0	8.8	10.9	15.8	20.8	49.5	13.8	14.3
Merch. exports	-2.7	-6.7	-2.7	5.1	2.4	10.9	18.5	13.1	7.2	10.3	10.1	6.5
Developed less U.S.												
Real GDP	1.1	0.8	1.9	4.2	3.5	2.8	3.4	3.7	3.6	3.1	3.3	2.7
Consumer prices	10.0	8.2	6.1	4.8	4.4	2.7	2.6	3.1	4.3	3.6	4.1	5.7
Merch. exports	-3.2	-4.4	-0.5	6.9	4.6	19.4	17.7	12.4	5.9	11.7	10.6	7.6
Developing												
Real GNP	2.0	1.8	1.5	4.0	3.8	3.7	4.5	5.7	3.4	3.1	5.0	3.5
Consumer prices	28.4	30.0	39.5	35.1	35.3	27.1	35.3	57.3	78.9	122.3	37.3	39.5
Merch. exports	-1.8	-10.4	-6.5	2.9	-1.7	-6.0	20.5	14.7	10.1	8.6	10.6	4.7
Asia, incl. China												
Real GDP	6.1	5.5	7.7	7.3	7.0	6.1	7.0	9.2	6.4	5.8	6.1	6.8
Consumer prices	9.3	5.8	6.2	6.7	7.2	5.6	7.4	11.8	10.1	8.2	10.4	8.3
Merch. exports	7.6	-0.5	4.6	14.6	-0.9	6.8	30.1	23.1	11.4	9.9	12.7	12.0
Latin America												
Real GDP	-0.4	-1.5	-2.6	3.3	3.4	3.6	3.1	1.0	0.8	-0.9	4.2	1.7
Consumer prices	60.1	73.6	118.9	116.5	127.7	62.3	116.1	217.0	349.1	304.3	81.2	131.7
Merch. exports	6.5	-10.6	-1.0	6.7	-7.6	-14.6	9.0	16.9	10.0	6.7	7.4	4.5
Africa												
Real GDP	-1.9	0.6	0.0	-0.3	3.9	1.0	1.3	2.2	2.6	2.8	2.2	1.6
Consumer prices	23.4	14.1	19.7	19.1	11.9	12.2	12.6	18.9	21.1	13.8	13.3	16.7
Merch. exports	-19.7	-9.1	-8.0	3.4	0.0	-21.3	17.6	-8.1	15.4	5.1	7.7	0.5
Middle East												
Real GDP	2.7	3.7	0.5	1.0	-1.8	2.0	1.5	1.4	6.9	4.5	3.5	1.8
Consumer prices	16.8	14.0	14.5	19.6	13.8	15.0	19.3	19.9	14.7	18.0	17.6	16.5
Merch. exports	-3.8	-21.1	-22.2	-10.5	-6.8	-19.2	16.6	0.6	28.6	6.5	7.7	-1.5
Eastern Europe, incl. USSR												
Real GDP	0.6	2.0	3.0	2.5	1.5	2.5	1.3	1.8	-1.1	-1.2	0.2	1.6
Consumer prices	6.3	12.3	5.0	4.0	5.8	7.1	8.7	14.9	63.7	103.6	14.5	14.2
Merch. exports	9.1	1.3	3.7	1.8	0.2	8.2	3.5	2.5	-1.6	4.5	4.3	4.4

P = preliminary. F = forecast. — = not available.

Information contact: Alberto Jorardo, (202) 786-1705.

Farm Prices

Table 4.—Indexes of Prices Received & Paid by Farmers, U.S. Average

	Annual			1989		1990				
	1987	1988	1989	May	Dec	Jan	Feb	Mar	Apr R	May P
1977=100										
Prices received										
All farm products	127	138	148	149	149	154	152	150	161	154
All crops	106	126	135	142	127	138	133	128	131	135
Food grains	103	136	156	161	153	151	145	143	142	140
Feed grains & hay	85	120	128	138	119	120	120	123	129	137
Feed grains	61	117	123	130	114	115	115	117	123	129
Cotton	99	95	98	96	102	99	100	106	107	110
Tobacco	129	133	144	144	144	144	144	144	147	147
Oil-bearing crops	79	108	102	110	90	91	90	91	93	94
Fruit, all	182	164	190	203	182	166	172	179	196	203
Fresh market 1/	196	196	200	216	188	189	171	165	207	216
Commercial vegetables	146	144	156	156	149	253	225	146	119	123
Fresh market	147	137	148	143	134	242	210	132	106	111
Potatoes & dry beans	126	124	187	220	176	184	192	210	235	242
Livestock & products	146	150	160	156	170	172	169	171	170	172
Meat animals	163	168	174	171	180	185	188	190	193	196
Dairy products	129	126	139	126	166	162	148	141	136	136
Poultry & eggs	107	118	138	147	136	139	131	145	132	126
Prices paid										
Commodities & services, interest, taxes, & wage rates	162	169	177	—	—	161	—	—	163	—
Production items	147	157	165	—	—	168	—	—	169	—
Feed	103	128	135	—	—	128	—	—	128	—
Feeder livestock	179	192	194	—	—	205	—	—	213	—
Seed	146	150	165	—	—	170	—	—	163	—
Fertilizer	118	130	137	—	—	129	—	—	130	—
Agricultural chemicals	124	126	132	—	—	133	—	—	141	—
Fuels & energy	161	183	180	—	—	200	—	—	187	—
Farm & motor supplies	145	148	155	—	—	156	—	—	156	—
Autos & trucks	208	215	223	—	—	225	—	—	234	—
Tractors & self-propelled machinery	174	181	193	—	—	199	—	—	201	—
Other machinery	165	197	208	—	—	210	—	—	217	—
Building & fencing	137	138	141	—	—	143	—	—	144	—
Farm services & cash rent	146	147	158	—	—	163	—	—	163	—
Int. payable per acre on farm real estate debt	189	182	177	—	—	178	—	—	178	—
Taxes payable per acre on farm real estate	144	148	152	—	—	159	—	—	156	—
Wage rates (seasonally adjusted)	160	171	185	—	—	193	—	—	193	—
Production items, interest, taxes, & wage rates	151	160	167	—	—	170	—	—	171	—
Ratio, prices received to prices paid (%) 2/	79	82	84	84	84	88	84	83	83	84
Prices received (1910-14=100)	578	632	674	682	681	705	693	686	689	702
Prices paid, etc. (parity index) (1910-14=100)	1,111	1,165	1,220	—	—	1,248	—	—	1,259	—
Parity ratio (1910-14=100) (%) 2/	52	54	55	—	56	55	—	—	55	—

1/ Fresh market for noncitrus; fresh market & processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities & services, interest, taxes, & wage rates. Ratio uses the most recent prices paid index. Prices paid data are quarterly & will be published in January, April, July, & October. R = revised. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 786-3313.

1/ Season average price by crop year for crops. Calendar year average of monthly prices for livestock. 2/ Equivalent on-tree returns. 3/ Average of all eggs sold by producers including hatching eggs & eggs sold at retail. 4/ Average local market price, excluding incentive payments. 5/ Weighted average of first 9 months of the season - not a projection for 1989/90. P = preliminary. R = revised. — = not available.

Producer & Consumer Prices

1/ Beef, veal, lamb, pork, & processed meat. 2/ Includes butter. 3/ Excludes butter.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1989			1990			
	1987	1988	1989 P	Apr	Nov	Dec R	Jan	Feb	Mar	Apr
	1982 = 100									
Finished goods 1/	105.4	108.0	113.5	113.0	114.9	115.4	117.5	117.4	117.0	117.0
Consumer foods	109.5	112.8	118.7	117.7	120.1	121.1	123.8	124.4	124.1	123.2
Fresh fruit	112.0	113.5	111.9	111.5	113.0	109.8	103.1	112.0	112.5	110.3
Fresh & dried vegetables	103.7	105.5	116.9	119.3	95.8	105.2	158.6	188.7	148.9	103.5
Dried fruit	95.0	99.1	103.0	102.3	106.3	106.3	108.9	106.9	106.9	106.3
Canned fruit & juice	115.3	120.2	122.6	121.7	123.4	123.4	123.9	128.6	127.5	127.6
Frozen fruit & juice	113.3	129.8	124.6	120.8	118.7	118.1	128.6	147.0	147.8	148.0
Fresh veg. excl. potatoes	99.0	100.4	104.2	107.1	80.0	88.4	159.9	199.2	138.6	74.8
Canned veg. & juices	103.5	108.3	118.8	118.8	117.8	118.0	118.5	117.9	118.0	119.1
Frozen vegetables	107.3	108.6	115.5	115.0	118.8	117.1	117.9	117.8	118.4	117.8
Potatoes	120.1	113.9	153.6	152.7	146.7	160.2	162.0	161.2	196.3	199.0
Eggs	87.6	88.6	119.8	110.8	134.5	141.3	154.9	114.0	128.9	127.9
Bakery products	118.4	128.4	135.4	133.6	137.4	138.4	138.7	139.9	140.2	140.4
Meats	100.4	99.9	104.8	103.3	107.2	108.4	110.6	111.1	111.5	114.4
Beef & veal	95.5	101.4	109.0	112.1	108.7	110.7	113.1	113.7	113.7	115.7
Pork	104.9	95.0	97.5	88.5	104.5	105.1	107.2	107.8	108.9	113.7
Processed poultry	103.4	111.6	120.8	124.9	110.3	110.2	107.9	111.2	117.8	114.4
Fish	140.0	148.7	144.6	150.9	140.1	138.2	156.2	156.4	160.8	162.0
Dairy products	101.6	102.2	110.6	105.6	120.1	121.4	120.9	117.1	115.0	115.1
Processed fruits & vegetables	109.6	113.8	120.0	119.0	119.1	120.4	122.5	125.7	128.8	128.8
Shortening & cooking oil	103.9	118.8	118.6	117.5	117.5	118.2	116.8	116.9	120.9	118.6
Consumer finished goods less foods	100.7	103.1	109.9	108.8	109.9	110.4	113.2	112.4	111.7	111.9
Beverages, alcoholic	110.3	111.8	115.2	115.5	114.8	114.6	115.0	116.4	117.7	117.3
Soft drinks	111.8	114.3	117.2	118.1	120.0	119.8	119.6	121.3	123.2	123.3
Apparel	108.3	111.7	114.5	113.8	115.5	115.7	118.5	117.2	117.0	117.1
Footwear	109.3	115.1	120.8	120.0	122.5	123.1	123.7	124.7	124.5	124.8
Tobacco products	154.6	171.9	184.9	187.3	200.4	209.6	209.6	214.1	212.5	212.5
Intermediate materials 2/	101.5	107.1	112.0	112.4	112.0	111.9	113.4	112.5	112.4	112.8
Materials for food manufacturing	100.8	106.0	112.7	111.1	115.4	115.5	115.5	114.9	115.8	117.3
Flour	92.9	105.7	114.6	113.6	112.9	113.6	113.2	112.9	110.6	112.4
Refined sugar 3/	106.4	108.9	118.3	115.8	120.1	122.0	122.3	121.9	122.5	123.4
Crude vegetable oils	84.2	116.6	103.4	107.8	102.6	97.9	100.2	102.6	113.7	113.9
Crude materials 4/	93.7	96.0	103.0	104.4	102.6	104.2	106.7	106.9	105.6	102.5
Foodstuffs & feedstuffs	98.2	106.1	111.1	111.6	109.9	112.6	113.6	114.4	115.2	114.8
Fruits & vegetables 5/	106.8	108.5	114.1	115.3	102.9	106.7	133.5	154.2	132.3	106.0
Grains	71.1	97.9	106.4	109.8	101.1	101.0	100.8	100.4	100.2	107.2
Livestock	102.0	103.3	106.0	106.4	105.6	110.5	110.2	112.7	116.5	117.4
Poultry, live	101.2	121.5	128.8	138.4	111.8	104.3	108.9	115.5	129.1	117.3
Fibers, plant & animal	106.4	98.4	107.8	105.0	115.3	106.3	104.8	108.7	114.7	118.7
Fluid milk	91.8	89.4	98.1	90.2	113.1	116.2	117.0	108.8	100.6	96.7
Oilseeds	99.2	134.0	123.8	130.7	106.1	106.7	106.1	104.6	107.2	108.0
Tobacco, leaf	85.7	87.2	93.9	93.7	93.7	93.7	93.7	93.7	93.7	93.7
Sugar, raw cane	110.2	111.9	115.5	112.3	118.0	117.5	119.3	117.9	119.0	120.7
All commodities	102.8	106.9	112.2	112.3	112.7	113.0	114.9	114.4	114.2	114.0
Industrial commodities	102.5	106.3	111.6	111.8	112.1	112.3	114.2	113.6	113.2	113.1
All foods 6/	107.8	111.5	117.8	116.6	119.1	119.9	122.7	123.3	122.9	122.1
Farm products & processed foods & feeds	103.7	110.0	115.3	115.0	115.5	116.6	118.2	118.5	118.7	118.4
Farm products	95.5	104.9	110.7	111.0	109.0	111.5	114.5	115.7	115.0	112.8
Processed foods & feeds 6/	107.9	112.7	117.9	117.2	118.9	119.3	120.2	120.0	120.8	121.4
Cereal & bakery products	112.6	123.0	131.1	129.1	132.4	133.0	133.0	133.7	133.9	134.5
Sugar & confectionery	112.6	114.7	120.1	119.2	120.5	121.0	120.9	121.2	122.0	122.9
Beverages	112.5	114.3	118.3	119.2	118.4	118.4	118.6	119.7	120.8	121.0

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types & sizes of refined sugar. 4/ Products entering market for the first time that have not been manufactured at that point. 5/ Fresh & dried. 6/ Includes all raw, intermediate, & processed foods (excludes soft drinks, alcoholic beverages, & manufactured animal feeds). P = preliminary. R = revised.

Information contact: Ann Duncan (202) 786-3313.

Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual			1989			1990			
	1987	1988	1989 P	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Market basket 1/										
Retail cost (1982-84=100)	111.6	116.5	124.6	123.6	126.6	127.4	132.2	133.1	132.9	132.2
Farm value (1982-84=100)	97.1	100.5	107.3	107.2	108.8	110.5	118.0	117.9	118.3	113.1
Farm-retail spread (1982-84=100)	119.4	125.1	134.0	132.4	136.1	136.5	139.8	141.3	140.8	142.5
Farm value-retail cost (%)	30.5	30.2	30.1	30.4	30.1	30.4	31.3	31.0	31.2	30.0
Meat products										
Retail cost (1982-84=100)	109.6	112.2	116.7	115.6	119.3	120.0	122.3	123.5	124.0	125.2
Farm value (1982-84=100)	101.2	99.5	103.3	103.4	104.0	106.9	111.2	111.6	113.7	117.0
Farm-retail spread (1982-84=100)	118.3	125.2	130.4	128.1	135.0	133.4	133.7	135.7	134.5	133.6
Farm value-retail cost (%)	46.7	44.9	44.8	45.3	44.1	45.1	46.1	45.8	46.4	47.3
Dairy products										
Retail cost (1982-84=100)	105.9	108.4	115.6	114.1	120.2	122.9	125.8	126.9	126.8	125.2
Farm value (1982-84=100)	93.3	90.6	99.1	93.0	110.0	113.6	115.2	108.5	102.8	96.5
Farm-retail spread (1982-84=100)	117.5	124.7	130.9	133.5	129.6	131.4	135.6	143.9	149.0	151.6
Farm value-retail cost (%)	42.3	40.1	41.1	39.1	43.9	44.4	43.9	41.0	38.9	37.0
Poultry										
Retail cost (1982-84=100)	112.6	120.7	132.7	133.0	126.8	127.8	128.6	130.5	134.8	132.1
Farm value (1982-84=100)	93.8	110.2	118.2	125.9	100.6	96.7	100.6	107.1	110.7	107.9
Farm-retail spread (1982-84=100)	134.2	132.8	149.3	141.2	157.0	163.6	160.9	157.4	155.7	160.0
Farm value-retail cost (%)	44.6	48.9	47.7	50.7	42.4	40.5	41.9	43.9	46.3	43.7
Eggs										
Retail cost (1982-84=100)	91.5	93.6	118.5	117.6	129.4	134.9	143.9	124.7	131.6	130.3
Farm value (1982-84=100)	76.8	76.7	107.7	99.8	125.1	133.4	135.4	108.4	125.6	110.3
Farm-retail spread (1982-84=100)	117.9	123.9	137.7	149.5	137.1	137.6	159.1	153.9	142.3	166.2
Farm value-retail cost (%)	53.9	52.7	58.4	54.5	62.1	63.6	60.5	55.9	61.3	54.4
Cereal & bakery products										
Retail cost (1982-84=100)	114.8	122.1	132.4	130.4	135.3	136.1	136.9	137.4	137.6	138.9
Farm value (1982-84=100)	71.0	82.7	101.7	103.6	99.4	101.2	101.1	99.5	100.0	99.7
Farm-retail spread (1982-84=100)	120.9	126.2	136.7	134.1	140.3	141.0	141.9	142.7	142.8	144.4
Farm value-retail cost (%)	7.6	9.3	9.4	9.7	9.0	9.1	9.0	8.9	8.9	8.8
Fresh fruits										
Retail cost (1982-84=100)	135.6	145.4	154.7	151.0	155.3	158.6	177.3	172.5	172.8	179.1
Farm value (1982-84=100)	113.9	116.5	108.9	90.4	135.6	109.2	124.5	131.9	126.4	122.1
Farm-retail spread (1982-84=100)	145.7	158.7	175.8	179.0	164.4	181.4	201.7	191.3	194.2	205.4
Farm value-retail cost (%)	26.5	25.3	22.2	18.9	27.6	21.7	22.2	24.1	23.1	21.5
Fresh vegetables										
Retail cost (1982-84=100)	121.6	129.3	143.1	144.1	141.9	136.5	176.9	186.3	168.3	145.6
Farm value (1982-84=100)	112.0	105.8	124.0	148.0	102.0	118.0	197.4	207.6	187.6	124.4
Farm-retail spread (1982-84=100)	126.5	141.3	152.9	142.1	162.4	148.0	166.4	175.3	158.4	156.5
Farm value-retail cost (%)	31.3	27.8	29.4	34.9	24.4	29.4	37.9	37.8	37.9	29.0
Processed fruits & vegetables										
Retail cost (1982-84=100)	109.0	117.6	125.0	124.3	125.0	124.9	125.1	129.4	132.2	133.2
Farm value (1982-84=100)	111.1	136.6	134.6	132.7	135.8	130.5	136.5	146.4	149.0	151.5
Farm-retail spread (1982-84=100)	108.3	111.7	122.0	121.7	121.6	123.1	121.6	124.1	126.9	127.5
Farm value-retail cost (%)	24.2	27.6	25.6	25.4	25.8	24.8	25.9	26.9	26.8	27.1
Fats & oils										
Retail cost (1982-84=100)	108.1	113.1	121.2	121.6	121.0	121.6	123.5	123.4	124.2	124.3
Farm value (1982-84=100)	74.1	103.0	95.7	106.8	95.3	93.0	93.0	96.7	108.0	106.3
Farm-retail spread (1982-84=100)	120.6	118.8	130.5	127.1	130.5	132.1	134.7	133.2	130.1	130.9
Farm value-retail cost (%)	18.6	24.5	21.2	23.6	21.2	20.6	20.3	21.1	23.4	23.0

	Annual			1989			1990			
	1987	1988	1989 P	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Beef, Choice										
Retail price 2/ (cts./lb.)	242.5	254.7	269.9	269.8	272.9	274.4	281.3	281.5	281.5	285.4
Net carcass value 3/ (cts.)	145.3	153.9	160.6	169.5	159.6	165.9	168.7	167.9	169.2	170.9
Net farm value 4/ (cts.)	137.9	147.4	155.4	164.3	154.8	160.4	163.3	164.2	166.2	168.1
Farm-retail spread (cts.)	104.6	107.3	114.5	105.5	118.1	114.0	118.0	117.3	115.3	117.3
Carcass-retail 5/ (cts.)	97.2	100.8	109.3	100.3	113.3	108.5	112.6	113.6	112.3	114.5
Farm-carcass 6/ (cts.)	7.4	6.5	5.2	5.2	4.8	5.5	5.4	3.7	3.0	2.8
Farm value-retail price (%)	57	58	58	61	57	58	58	58	59	59
Pork										
Retail price 2/ (cts./lb.)	188.4	183.4	182.9	179.5	189.6	191.2	195.1	196.5	197.0	200.9
Wholesale value 3/ (cts.)	113.0	101.0	99.2	88.6	106.9	112.3	104.8	105.6	110.9	114.8
Net farm value 4/ (cts.)	82.7	69.4	70.4	59.0	73.2	79.5	76.6	78.4	83.3	86.1
Farm-retail spread (cts.)	105.7	114.0	112.5	120.5	116.4	111.7	118.5	118.1	113.7	114.8
Wholesale-retail 5/ (cts.)	75.4	82.4	83.7	90.9	82.7	78.9	80.3	80.9	86.1	86.1
Farm-wholesale 6/ (cts.)	30.3	31.6	28.8	29.6	33.7	32.8	28.2	27.2	27.6	28.7
Farm value-retail price (%)	44	38	38	33	39	42	39	40	42	43

1/ Retail costs are based on CPI-U of retail prices for domestically produced farm foods, published monthly by BLS. The farm value is the payment for the quantity of farm equivalent to the retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale & may include marketing charges such as grading & packing for some commodities. The farm-retail spread, the difference between the retail price & the farm value, represents charges for assembling, processing, transporting, distributing. 2/ Weighted average price of retail cuts from pork & choice yield grade 3 beef carcasses. Prices for BLS. 3/ Value of carcass quantity (beef) & wholesale cuts (pork) equivalent to 1 lb. of retail cuts; beef adjusted for value of fat & bone byproducts. 4/ Market value to producer for live animal equivalent to 1 lb. of retail cuts, minus value of byproducts. 5/ Charges for retailing & other marketing services such as fabricating, wholesaling, in-city transportation. 6/ Charges for livestock marketing, processing, & transportation.

Information contacts: Denis Dunham (202) 786-1870, Larry Dwyer (202) 786-1712.

Table 9.—Price Indexes of Food Marketing Costs

(See the June 1990 issue.)

Information contact: Denis Dunham (202) 786-1870.

Livestock & Products

Table 10.—U.S. Meat Supply & Use

	Beg. stocks	Produc- tion 1/	Imports	Total supply	Exports	Ending stocks	Consumption		Primary market price 3/
							Total	Per capita 2/	
Million pounds 4/							Pounds		
Beef									
1987	412	23,566	2,269	26,247	604	386	25,257	73.4	64.60
1988	386	23,589	2,379	26,354	680	422	25,252	72.3	69.54
1989	422	23,087	2,175	25,684	1,062	325	24,287	68.9	72.62
1990 F	335	23,095	2,156	25,586	1,190	326	24,071	67.7	73-77
Pork									
1987	248	14,374	1,195	15,817	109	347	16,362	59.1	51.69
1988	347	16,684	1,137	17,168	195	414	16,559	63.5	43.39
1989	414	15,813	896	17,123	268	285	16,570	63.2	44.03
1990 F	285	15,531	945	16,761	274	375	16,112	60.9	54-58
Veal 5/									
1987	7	429	24	460	7	4	449	1.5	78.05
1988	4	396	27	427	10	5	412	1.4	99.85
1989	5	355	0	360	0	4	356	1.2	91.84
1990 F	4	298	0	302	0	4	298	1.0	99-103
Lamb & mutton									
1987	13	315	44	372	1	8	363	1.3	78.09
1988	8	335	51	394	1	6	387	1.4	68.26
1989	6	347	63	416	2	8	406	1.5	67.32
1990 F	8	359	54	421	2	7	412	1.5	59-63
Total red meat									
1987	679	38,684	3,532	42,895	721	745	41,430	135.9	—
1988	745	40,004	3,594	44,343	886	847	42,610	138.6	—
1989	847	39,602	3,134	43,583	1,332	632	41,619	134.7	—
1990 F	632	39,283	3,155	43,070	1,466	711	40,663	131.0	—
Broilers									
1987	24	15,597	0	15,620	752	25	14,944	60.8	47.4
1988	25	16,187	0	16,212	785	38	15,410	62.5	56.3
1989	38	17,428	0	17,464	859	38	16,567	66.6	59.0
1990 F	38	18,712	0	18,751	1,067	30	17,653	70.4	53-57
Mature chicken									
1987	163	638	0	801	15	188	598	2.5	—
1988	168	633	0	821	26	157	639	2.6	—
1989	157	575	0	731	24	189	519	2.1	—
1990 F	189	584	0	773	27	180	566	2.3	—
Turkeys									
1987	178	3,832	0	4,011	33	266	3,712	15.2	57.8
1988	266	3,960	0	4,226	51	250	3,926	15.9	61.5
1989	250	4,276	0	4,526	40	236	4,250	17.1	66.7
1990 F	236	4,628	0	4,863	47	290	4,556	18.2	60-64
Total poultry									
1987	365	20,068	0	20,433	800	479	19,154	78.5	—
1988	479	20,780	0	21,259	842	442	19,975	81.1	—
1989	442	22,280	0	22,722	923	463	21,335	85.8	—
1990 F	463	23,924	0	24,388	1,142	470	22,776	90.8	—
Red meat & poultry									
1987	1,044	58,752	3,532	63,328	1,521	1,224	60,583	214.4	—
1988	1,224	60,784	3,594	65,601	1,728	1,289	62,584	219.6	—
1989	1,289	61,882	3,134	66,305	2,256	1,065	62,954	220.5	—
1990 F	1,095	63,207	3,155	67,458	2,608	1,181	63,669	221.8	—

1/ Total including farm production for red meats & federally inspected plus nonfederally inspected for poultry. 2/ Retail weight basis. (The beef carcass-to-retail conversion factor was .71 for 1987, & 70.5 for 1988-90.) 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Choice steers, Omaha 1,000-1,100 lb.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb & mutton: Choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats & certified ready-to-cook for poultry. 5/ Beginning 1989 veal trade no longer reported separately. F = forecast. — = not available.

Information contacts: Polly Cochran, or Maxine Davis (202) 786-1284.

Table 11.—U.S. Egg Supply & Use

	Beg. stocks	Pro-duction	Im-ports	Total supply	Ex-ports	Hatch-ing use	Ending stocks	Consumption		Wholesale price*
								Total	Per capita	
						Million dozen				Cts./doz.
1985	11.1	5,710.1	12.7	5,733.9	70.6	548.1	10.7	5,104.5	255.9	66.4
1986	10.7	5,766.3	13.7	5,790.7	101.6	566.8	10.4	5,111.9	253.8	71.1
1987	10.4	5,868.2	5.6	5,884.2	111.2	599.1	14.4	5,159.5	253.8	61.6
1988	14.4	5,783.5	5.3	5,803.2	141.8	605.9	15.2	5,040.3	245.5	62.1
1989	15.2	5,586.8	25.2	5,627.1	91.6	641.6	10.7	4,883.3	235.8	81.9
1990 F	10.7	5,660.3	7.9	5,676.9	90.4	677.3	10.0	4,901.2	234.5	72-76

* Cartoned grade A large eggs, New York. F = forecast.

Information contact: Maxine Davis (202) 786-1714.

Table 12.—U.S. Milk Supply & Use¹

	Pro-duction	Farm use	Commercial		Im-ports	Total commercial supply	CCC net re-movals	Commercial		All milk price ^{2/}
			Farm market-ings	Beg. stock				Ending stocks	Disap-pear-ance	
						Billion pounds				
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.61
1983	139.6	2.4	137.2	4.6	2.6	144.4	16.8	5.2	122.4	13.68
1984	135.4	2.9	132.4	5.2	2.7	140.4	8.6	4.9	128.8	13.46
1985	143.0	2.5	140.6	4.9	2.8	148.3	13.2	4.6	130.5	12.75
1986	143.1	2.4	140.7	4.6	2.7	148.1	10.6	4.2	133.3	12.51
1987	142.7	2.3	140.5	4.2	2.5	147.1	6.7	4.6	135.8	12.54
1988	145.2	2.2	142.9	4.6	2.4	150.0	8.9	4.3	136.8	12.24
1989	144.3	2.1	142.2	4.3	2.5	148.9	9.0	4.1	135.8	13.54
1990 F	147.4	2.1	145.3	4.1	2.5	151.9	7.1	4.6	140.2	14.10

^{1/} Milkfat basis. Totals may not add because of rounding. ^{2/} Delivered to plants & dealers; does not reflect deductions. F = forecast.

Information contact: Jim Miller (202) 786-1770.

Table 13.—Poultry & Eggs

	Annual			1989			1990			
	1987	1988	1989	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Broilers										
Federally inspected slaughter, certified (mil. lb.)	15,602.5	16,124.4	17,334.2	1,335.8	1,432.2	1,491.1	1,516.6	1,367.7	1,607.5	1,483.7
Wholesale price, 12-city (cts./lb.)	47.4	56.3	59.0	63.5	49.2	48.4	51.7	57.4	60.4	55.3
Price of grower feed (\$/ton)	186	220	235	240	221	220	224	223	221	217
Broiler-feed price ratio 1/	3.7	3.1	3.1	3.3	2.7	2.6	2.7	3.0	3.3	3.1
Stocks beginning of period (mil. lb.)	23.9	24.8	35.9	32.4	34.5	40.6	38.3	28.2	22.7	31.4
Broiler-type chicks hatched (mil.) 2/	5,379.2	5,602.4	5,944.3	494.9	469.6	522.1	516.3	472.9	543.1	535.8
Turkeys										
Federally inspected slaughter, certified (mil. lb.)	3,717.1	3,923.4	4,174.8	268.8	423.1	334.9	319.0	297.8	366.6	328.0
Wholesale price, Eastern U.S., 8-16 lb. young hens (cts./lb.)	57.8	61.2	66.7	68.3	72.5	72.7	55.6	55.2	58.9	59.6
Price of turkey grower feed (\$/ton)	213	243	252	254	241	240	239	241	240	239
Turkey-feed price ratio 1/	3.9	3.0	3.2	3.4	3.4	3.3	3.0	2.6	3.1	3.1
Stocks beginning of period (mil. lb.)	178.2	266.2	249.7	269.2	571.8	258.6	235.9	267.1	276.3	318.8
Poults placed in U.S. (mil.)	264.2	261.4	289.0	26.0	20.7	21.5	24.7	24.9	27.3	28.9
Eggs										
Farm production (mil.)	70,418	69,402	67,041	5,557	5,556	5,772	5,695	5,155	5,834	5,633
Average number of layers (mil.)	284	277	269	268	270	271	271	272	272	271
Rate of lay (eggs per layer on farms)	248	251	250	20.8	20.6	21.3	20.8	19.0	21.5	20.8
Cartoned price, New York, grade A large (cts./doz.) 3/	61.6	62.1	61.9	76.6	93.4	99.6	92.4	79.6	91.5	82.4
Price of laying feed (\$/ton)	170	202	209	211	199	200	199	198	198	195
Egg-feed price ratio 1/	6.3	5.3	6.7	6.3	7.9	8.3	8.4	7.1	8.0	8.6
Stocks, first of month										
Shell (mil. doz.)	0.66	1.29	0.27	0.48	0.18	0.33	0.36	0.66	0.48	0.69
Frozen (mil. doz.)	9.8	13.1	14.9	11.2	11.3	10.2	10.3	10.8	11.5	12.7
Replacement chicks hatched (mil.)	428	388	384	36.1	29.7	29.3	32.0	32.2	36.4	37.2

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks is currently reported for 15 States only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Price of cartoned eggs to volume buyers for delivery to retailers.

Information contact: Maxine Davis (202) 786-1714.

Table 14.—Dairy

	Annual			1989			1990			
	1987	1988	1989	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt) 1/	11.23	11.03	12.37	11.09	14.69	14.93	13.94	12.21	12.02	12.32
Wholesale prices										
Butter, grade A Chl. (cts./lb.)	140.2	132.5	127.9	131.0	120.5	120.0	110.8	108.3	108.3	106.9
Am. cheese, Wia. assembly pt. (cts./lb.)	123.2	123.8	138.8	120.4	163.6	162.2	152.3	131.6	130.7	140.5
Nonfat dry milk (cts./lb.) 2/	79.3	80.2	105.5	81.1	158.7	128.0	88.2	82.3	98.6	104.3
USDA net removals										
Total milk equiv. (mil. lb.) 3/	8,706.0	8,856.2	8,967.9	1,398.8	163.7	483.4	1,480.9	1,244.9	936.7	974.5
Butter (mil. lb.)	187.3	312.8	413.4	64.1	7.7	22.1	71.8	59.8	45.0	48.9
Am. cheese (mil. lb.)	282.0	238.1	37.4	7.0	0	0	0	0	0	0
Nonfat dry milk (mil. lb.)	559.4	287.6	0	0	0	0	2.9	-0.7	0	0
Milk										
Milk prod. 21 States (mil. lb.)	121,431	123,518	122,531	10,896	9,654	10,047	10,479	9,813	10,997	10,841
Milk per cow (lb.)	13,969	14,291	14,370	1,255	1,132	1,178	1,227	1,150	1,292	1,274
Number of milk cows (1,000)	8,693	8,643	8,527	8,524	8,531	8,544	8,537	8,534	8,510	8,508
U.S. milk production (mil. lb.)	142,709	145,152	144,252	6/ 12,582	6/ 11,396	6/ 11,860	6/ 12,359	6/ 11,574	6/ 12,970	6/ 12,753
Stock, beginning										
Total (mil. lb.)	12,867	7,440	8,189	11,019	11,136	9,606	8,795	9,294	9,819	10,651
Commercial (mil. lb.)	4,165	4,846	4,289	4,959	4,893	4,196	4,131	4,509	4,712	5,008
Government (mil. lb.)	8,702	2,794	3,900	6,059	6,243	5,410	4,664	4,785	5,107	5,643
Imports, total (mil. lb.) 3/	2,490	2,394	2,499	174	283	285	193	194	195	—
Commercial disappearance (mil. lb.)	135,754	136,805	135,843	10,962	12,019	11,569	10,508	10,162	11,753	—
Butter										
Production (mil. lb.)	1,104.1	1,207.5	1,273.6	125.8	94.4	107.4	127.1	116.7	120.2	120.0
Stocks, beginning (mil. lb.)	193.0	143.2	214.7	341.9	370.8	294.1	258.2	282.0	285.1	318.8
Commercial disappearance (mil. lb.)	902.5	909.8	854.1	57.6	116.5	87.5	57.4	54.3	72.6	—
American cheese										
Production (mil. lb.)	2,716.7	2,756.6	2,672.6	233.1	206.4	230.8	231.7	239.8	255.2	249.9
Stocks, beginning (mil. lb.)	897.1	370.4	293.0	286.5	253.8	238.0	236.2	262.1	272.4	292.7
Commercial disappearance (mil. lb.)	2,437.1	2,570.0	2,681.0	222.6	223.4	231.9	207.2	229.6	235.3	—
Other cheese										
Production (mil. lb.)	2,827.7	2,815.4	2,941.3	238.1	246.6	258.7	252.1	232.1	274.8	265.1
Stocks, beginning (mil. lb.)	92.0	89.7	104.7	110.0	81.3	95.4	93.2	99.3	103.8	104.0
Commercial disappearance (mil. lb.)	2,880.2	3,034.5	3,208.9	245.4	262.1	293.2	259.9	246.1	294.8	—
Nonfat dry milk										
Production (mil. lb.)	1,956.8	979.7	874.7	100.8	51.2	84.8	81.4	71.2	77.4	90.0
Stocks, beginning (mil. lb.)	686.8	177.2	53.1	88.3	36.2	32.5	49.5	49.4	58.8	61.8
Commercial disappearance (mil. lb.)	492.9	734.3	873.0	87.3	55.2	48.7	58.7	64.3	75.3	—
Frozen dessert										
Production (mil. gal.) 4/	1,260.7	1,248.0	1,214.0	101.6	83.7	77.1	79.5	85.4	103.9	104.1
	Annual			1988		1989				1990
	1987	1988	1989	III	IV	I	II	III	IV P	I P
Milk production (mil. lb.)	142,709	145,152	144,252	35,920	35,262	36,445	37,702	35,188	34,917	36,903
Milk per cow (lb.)	13,819	14,145	14,244	3,506	3,447	3,588	3,727	3,484	3,448	3,641
No. of milk cows (1,000)	10,327	10,262	10,127	10,245	10,229	10,184	10,116	10,101	10,127	10,133
Milk-feed price ratio 5/	1.84	1.58	1.64	1.46	1.59	1.56	1.48	1.63	1.92	1.83
Returns over concentrate 5/ costs (\$/cwt milk)	9.52	9.05	10.08	8.53	9.86	9.63	8.80	9.80	12.10	11.32

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States Production area. 3/ Milk equivalent, fat basis. 4/ Ice cream, ice milk, & hard sherbet. 5/ Based on average milk price after adjustment for price support deductions. 6/ Estimated. P = preliminary. — = not available.

Information contact: Jim Miller (202) 786-1770.

Table 15.—Wool

	Annual			1989		1990				
	1987	1988	1989	May	Dec	Jan	Feb	Mar	Apr	May
U.S. wool price, (cts./lb.) 1/	265	438	370	375	300	294	267	287	284	275
Imported wool price, (cts./lb.) 2/	247	372	354	339	338	334	325	321	335	325
U.S. mill consumption, scoured 3/										
Apparel wool (1,000 lb.)	129,877	117,069	112,998	8,853	9,057	28,209	—	—	—	—
Carpet wool (1,000 lb.)	13,092	15,633	14,122	1,172	1,002	3,829	—	—	—	—

1/ Wool price delivered at U.S. mills, clean basis. Graded Territory 64's (20.60-22.64 microns) staple 2-3/4" & up. 2/ Wool price, Charleston, SC warehouse, clean basis, Australian 80/82's, type 64A (24 micron). Duty since 1982 has been 10.0 cents. 3/ Beginning 1990 mill consumption reported only on a quarterly basis. — = not available.

Information contact: John Lawler (202) 786-1840.

Table 16.—Meat Animals

	Annual			1988			1990			
	1987	1988	1989	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Cattle on feed (7 States)										
Number on feed (1,000 head) 1/	7,953	8,411	8,045	8,252	7,911	8,331	8,378	8,526	8,319	8,483
Placed on feed (1,000 head)	21,040	20,654	20,834	1,539	2,001	1,552	1,896	1,403	1,902	1,377
Marketings (1,000 head)	19,545	19,918	19,422	1,580	1,490	1,418	1,834	1,515	1,818	1,554
Other disappearance (1,000 head)	1,217	1,202	1,079	124	91	87	114	95	120	125
Beef steer—corn price ratio,										
Omaha 2/	41.0	31.5	30.3	30.2	32.2	32.8	34.2	34.0	32.6	31.1
Hog—corn price ratio, Omaha 2/	32.8	19.6	18.4	14.8	20.1	21.7	21.8	22.0	21.9	21.2
Market prices (\$/cwt)										
Slaughter cattle										
Choice steers, Omaha	64.60	69.54	72.52	75.31	72.48	75.21	76.73	76.61	78.18	79.36
Utility cows, Omaha	44.83	46.55	47.86	45.19	46.60	49.38	49.78	52.79	54.67	54.48
Choice vealers, S. St. Paul 3/	78.92	90.23	248.82	266.25	242.90	230.00	248.50	255.00	NQ	NQ
Feeder cattle										
Choice, Kansas City, 600–700 lb.	75.38	83.67	86.13	82.63	87.38	86.25	85.70	84.88	87.50	90.81
Slaughter hogs										
Barrows & gilts, 7–markets	51.69	43.39	44.03	37.08	45.77	49.33	47.94	48.51	51.91	54.11
Feeder pigs										
S. Mo. 40–50 lb. (per head)	46.69	36.06	33.63	34.74	38.33	36.21	44.58	54.41	63.19	64.97
Slaughter sheep & lambs										
Lambs, Choice, San Angelo	78.09	66.26	67.32	78.17	56.08	60.83	54.80	60.38	63.69	54.75
Ewes, Good, San Angelo	38.62	38.88	38.58	42.45	35.25	39.42	38.30	38.47	38.81	36.50
Feeder lambs										
Choice, San Angelo	102.28	90.89	79.85	88.08	74.88	76.00	72.10	74.88	75.63	71.31
Wholesale meat prices, Midwest										
Choice steer beef, 600–700 lb.	97.24	103.34	107.78	113.84	107.05	111.41	113.30	112.80	113.65	114.70
Canner & cutter cow beef	85.26	87.77	94.43	89.77	92.92	100.73	99.89	100.95	102.04	100.61
Pork loins, 14–18 lb. 4/	106.23	97.49	101.09	91.59	91.75	107.28	101.38	107.78	117.28	120.68
Pork bellies, 12–14 lb.	63.11	41.25	34.14	25.49	49.96	42.23	48.65	42.53	42.60	52.60
Hams, skinned, 14–17 lb.	80.96	71.03	69.39	81.60	87.00	78.89	68.44	76.50	79.00	77.33
All fresh beef retail price 5/	212.64	224.81	238.97	238.40	243.69	245.36	247.81	249.14	249.10	252.88
Commercial slaughter (1,000 head)*										
Cattle	35,647	35,079	33,917	2,644	2,785	2,680	2,651	2,502	2,794	2,618
Steers	17,443	17,344	16,536	1,336	1,299	1,284	1,360	1,241	1,398	1,348
Heifers	10,906	10,754	10,408	763	815	789	829	789	834	771
Cows	6,610	6,337	6,318	493	611	559	606	448	481	448
Bulls & stags	689	644	659	52	60	48	58	46	51	51
Calves	2,815	2,506	2,172	158	182	172	181	150	171	132
Sheep & lambs	5,199	5,293	5,464	409	481	469	489	441	493	487
Hogs	81,061	87,795	88,693	7,383	8,039	7,233	7,605	6,820	7,454	6,959
Commercial production (mil. lb.)										
Beef	23,405	23,424	22,974	1,756	1,906	1,827	1,932	1,705	1,670	1,747
Veal	416	367	344	27	28	25	27	24	28	23
Lamb & mutton	309	329	341	26	31	31	32	29	32	31
Pork	14,312	15,623	15,750	1,322	1,446	1,288	1,359	1,215	1,328	1,247
	Annual			1988			1989			
	1987	1988	1989	IV	I	II	III	IV	I	II
Cattle on feed (13 States)										
Number on feed (1,000 head) 1/	9,555	10,114	9,688	8,851	9,688	9,918	8,680	8,276	9,943	10,063
Placed on feed (1,000 head)	25,074	24,423	24,484	8,655	6,232	5,212	5,719	7,321	6,088	—
Marketings (1,000 head)	23,126	23,459	22,955	5,466	5,658	6,040	5,896	5,361	5,583	7/ 6,088
Other disappearance (1,000 head)	1,369	1,390	1,274	352	344	410	227	293	385	—
Hogs & pigs (10 States) 6/										
Inventory (1,000 head) 1/	39,730	42,675	43,210	45,000	43,210	41,655	44,020	45,200	42,200	40,470
Breeding (1,000 head) 1/	5,125	5,435	5,335	5,460	5,335	5,440	5,565	5,336	5,280	5,250
Market (1,000 head) 1/	34,605	37,240	37,875	39,540	37,875	36,215	38,455	39,865	36,920	35,220
Farrowings (1,000 head)	8,853	9,370	9,203	2,301	2,109	2,580	2,324	2,190	2,025	7/ 2,496
Pig crop (1,000 head)	68,955	72,268	71,807	17,520	16,441	20,309	18,167	16,890	15,841	—

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live weight. 3/ Per head starting September 1988. 4/ Prior to 1984, 8–14 lb.; 1984 & 1985, 14–17 lb.; beginning 1986, 14–18 lb. 5/ New series estimating the composite price of all beef grades & ground beef sold by retail stores. This new series is in addition to, but does not replace, the series for the retail price of Choice beef that appears in table 8. 6/ Quarters are Dec. of preceding year–Feb. (I), Mar.–May (II), June–Aug. (III), & Sept.–Nov. (IV). 7/ Intentions. *Classes estimated. NQ = not quote. — = not available.

Information contacts: Polly Cochran (202) 786-1264.

Crops & Products

Table 17.—Supply & Utilization^{1,2}

	Area			Yield	Production	Total supply	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price
	Set aside	Planted	Harvested									
	3/					4/						5/
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
Wheat												
1985/86	18.8	75.6	64.7	37.5	2,425	3,868	279	767	915	1,901	1,905	3.08
1986/87	21.0	72.1	60.7	34.4	2,092	4,018	413	780	1,004	2,197	1,821	2.42
1987/88	23.9	65.8	56.0	37.7	2,107	3,945	280	806	1,598	2,644	1,261	2.67
1988/89*	22.5	65.5	53.2	34.1	1,812	3,099	157	818	1,419	2,394	702	3.72
1989/90*	9.7	76.6	62.1	32.8	2,036	2,758	225	832	1,250	2,307	452	3.71
1990/91*					2,689	3,162	300	840	1,250	2,390	772	2.90-3.30
Rice												
	Mil. acres			Lb./acre				Mil. cwt (rough equiv.)				\$/cwt
1985/86	1.24	2.51	2.49	5,414	134.9	201.8	—	6/85.8	58.7	124.5	77.3	6.53
1986/87	1.48	2.38	2.36	5,851	133.4	213.3	—	6/77.7	84.2	161.9	81.4	3.75
1987/88	1.57	2.36	2.33	5,555	129.6	184.0	—	6/80.4	72.2	152.6	31.4	7.27
1988/89*	1.09	2.93	2.90	5,514	159.9	195.4	—	6/83.2	85.6	188.8	26.7	6.83
1989/90*	1.21	2.73	2.69	5,749	154.5	185.9	—	6/85.2	77.0	182.2	23.7	7.25-7.50
1990/91*					180.0	188.7	—	6/87.4	76.0	183.4	25.3	6.00-8.00
Corn												
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
1985/86	5.4	83.4	75.2	118.0	8,877	10,539	4,095	1,180	1,241	6,498	4,040	2.23
1986/87	14.3	76.7	69.2	119.3	8,250	12,291	4,714	1,192	1,504	7,410	4,882	1.50
1987/88	23.0	65.7	59.2	119.8	7,131	12,016	4,805	1,229	1,723	7,767	4,258	1.94
1988/89*	20.5	67.9	58.3	84.6	4,929	9,191	3,987	1,245	2,028	7,260	1,930	2.54
1989/90*	10.1	72.3	64.8	116.2	7,527	9,490	4,550	1,280	2,350	8,180	1,280	2.35-2.40
1990/91*					8,100	9,082	4,650	1,315	2,200	8,165	1,267	2.35-2.75
Sorghum												
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
1985/86	0.9	18.3	16.8	68.8	1,120	1,420	684	28	178	889	551	1.93
1986/87	3.0	15.3	13.9	67.7	938	1,489	535	12	198	748	743	1.37
1987/88	4.1	11.8	10.5	69.4	731	1,474	555	25	231	811	683	1.70
1988/89*	3.9	10.4	9.0	63.8	577	1,239	468	22	310	800	440	2.27
1989/90*	2.9	11.9	11.2	55.4	618	1,057	525	15	275	815	242	2.10-2.15
1990/91*					685	927	500	15	250	765	182	2.15-2.55
Barley												
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
1985/86	0.7	13.2	11.6	51.0	591	848	333	169	22	523	325	1.98
1986/87	2.1	13.1	12.0	50.8	611	944	298	174	137	608	336	1.61
1987/88	2.9	11.0	9.9	52.4	521	869	254	174	120	548	321	1.81
1988/89*	2.8	9.9	7.6	38.0	290	622	166	180	79	425	198	2.80
1989/90*	2.2	9.2	8.3	48.6	403	610	175	180	85	440	170	2.40
1990/91*					415	595	175	185	85	445	150	2.35-2.75
Oats												
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
1985/86	0.1	13.3	8.2	63.7	521	728	480	82	2	544	184	1.23
1986/87	0.6	14.7	6.9	56.3	386	603	395	73	3	471	133	1.21
1987/88	0.8	18.0	6.9	54.0	374	552	358	81	1	440	112	1.56
1988/89*	0.3	13.9	5.5	39.3	218	393	194	100	1	294	98	2.61
1989/90*	0.3	12.1	6.9	54.4	374	537	300	115	1	416	122	1.48
1990/91*					350	537	300	120	1	421	116	1.30-1.70
Soybeans												
	Mil. acres			Bu./acre				Mil. bu.				\$/bu.
1985/86	0	63.1	61.8	34.1	2,099	2,415	0	1,053	740	1,879	538	5.05
1986/87	0	60.4	58.3	33.3	1,840	2,476	0	1,179	757	2,040	438	4.78
1987/88	0	58.2	57.2	33.0	1,938	2,374	0	1,174	802	2,072	302	5.88
1988/89*	0	58.9	57.4	27.0	1,549	1,855	0	1,058	527	1,873	182	7.42
1989/90*	0	60.5	59.4	32.4	1,927	2,112	0	1,110	610	1,817	295	5.70
1990/91*					1,925	2,233	0	1,155	825	1,878	355	5.00-6.25
Soybean oil												
								Mil. lbs.				7/ Cts./lb.
1985/86	—	—	—	—	11,617	12,257	—	10,053	1,257	11,310	947	18.00
1986/87	—	—	—	—	12,783	13,745	—	10,833	1,187	12,020	1,725	15.40
1987/88	—	—	—	—	12,974	14,895	—	10,930	1,873	12,803	2,092	22.65
1988/89*	—	—	—	—	11,737	13,967	—	10,591	1,681	12,252	1,715	21.10
1989/90*	—	—	—	—	12,429	14,150	—	11,700	1,500	13,200	950	21.75
1990/91*	—	—	—	—	12,850	13,850	—	11,650	1,400	13,050	800	22.0-25.0
Soybean meal												
								1,000 tons				9/ \$/ton
1985/86	—	—	—	—	24,951	25,338	—	19,090	6,036	25,126	212	155
1986/87	—	—	—	—	27,758	27,970	—	20,387	7,343	27,730	240	163
1987/88	—	—	—	—	28,080	28,300	—	21,293	8,854	28,147	153	222
1988/89*	—	—	—	—	24,843	25,100	—	19,798	5,129	24,927	173	233
1989/90*	—	—	—	—	26,577	26,750	—	21,000	4,600	26,250	250	172
1990/91*	—	—	—	—	27,500	27,750	—	22,300	5,150	27,450	300	145-175

See footnotes at end of table.

Table 17.—Supply & Utilization, continued

	Area		Yield	Production	Total supply	Feed and residual	Other domestic use	Exports	Total use	Ending Stocks	Farm price
	Set Aside	Planted									
	3/				4/						5/
	Mil. acres		Lb./acre			Mil. bales					
Cotton 10/											
1985/86	3.8	10.7	10.2	830	13.4	17.6	—	2.0	8.4	9.4	56.50
1986/87	4.2	10.0	8.5	552	9.7	18.1	—	6.7	14.1	5.0	52.40
1987/88	4.0	10.4	10.0	706	14.8	19.8	—	6.6	14.2	5.8	64.30
1988/89*	2.2	12.5	11.9	819	15.4	21.2	—	6.2	13.9	7.1	56.60
1989/90*	3.5	10.6	9.5	819	12.2	19.3	—	7.9	18.2	3.2	65.60
1990/91*					16.0	19.2	—	8.0	15.5	3.9	—

* June 13, 1990 Supply and Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, & oats, August 1 for cotton & rice, September 1 for soybeans, corn, & sorghum, October 1 for soybean meal & soybean oil. 2/ Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2,204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9298 bushels of barley, 68.8944 bushels of oats, 22.048 cwt of rice, and 4.59 480-pound bales of cotton. 3/ Includes diversion, PIK, acreage reduction, 50-92, & 0-92 programs. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding & Government purchases. 6/ Residual included in domestic use. 7/ Average of crude soybean oil, Decatur. 8/ Includes 196 million pounds in imports for 1987/88, 140 million in 1989/89, 15 million in 1989/90, and 50 million in 1990/91. 9/ Average of 44 percent, Decatur. 10/ Upland & extra long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply & use estimates & changes in ending stocks. — = not available or not applicable.

Information contact: Commodity Economics Division, Crops Branch (202) 786-1840.

Table 18.—Food Grains

	Marketing year 1/				1989		1990			
	1985/86	1986/87	1987/88	1988/89	Apr	Dec	Jan	Feb	Mar	Apr
Wholesale prices										
Wheat, No. 1 HAW,										
Kansas City (\$/bu.) 2/	3.28	2.72	2.96	4.17	4.46	4.39	4.30	4.14	4.04	4.13
Wheat, DNS,										
Minneapolis (\$/bu.) 2/	3.25	2.82	2.82	4.25	4.45	NQ	NQ	NQ	NQ	NQ
Rice, S.W. La. (\$/cwt) 3/	18.11	10.25	19.25	14.85	13.50	14.65	15.40	15.65	15.40	15.90
Wheat										
Exports (mil. bu.)	915	1,004	1,592	1,424	122	85	83	91	109	91
Milled (mil. bu.)	703	755	753	778	57	59	63	64	67	62
Wheat flour production (mil. cwt)	314	335	336	348	26	26	28	28	29	27
Rice										
Exports (mil. cwt, rough equiv.)	58.7	84.2	72.2	85.6	6.5	9.6	7.6	6.3	8.0	—
	Marketing year 1/				1988		1989			
	1986/87	1987/88	1988/89	Jun-Aug	Sept-Nov	Dec-Feb	Mar-May	June-Aug	Sept-Nov	Dec-Feb
Wheat										
Stocks, beginning (mil. bu.)	1,905	1,821	1,261	1,260.8	2,253.6	1,715.9	1,227.7	701.6	1,917.2	1,423.7
Domestic use										
Food (mil. bu.)	712	721	715	183.3	197.3	188.9	165.0	183.1	183.1	180.5
Seed, feed & residual (mil. bu.) 4/	485	365	260	283.2	17.6	-37.5	-2.8	273.1	-12.8	43.8
Exports (mil. bu.)	998	1,598	1,419	361.6	329.0	360.5	368.0	369.9	328.6	259.7

1/ Beginning June 1 for wheat & August 1 for rice. 2/ Ordinary protein. 3/ Long grain, milled basis. 4/ Residual includes feed use. — = not available. NQ = no quote.

Information contact: Ed Allen & Janet Livezey (202) 786-1840.

Table 19.—Cotton

	Marketing year 1/				1989		1990			
	1985/86	1986/87	1987/88	1988/89	Apr	Dec	Jan	Feb	Mar	Apr
U.S. price, SLM,										
1-1/16 in. (cts./lb.) 2/	60.0	53.2	63.1	57.7	61.4	63.6	62.2	65.0	68.1	71.3
Northern Europe prices										
Index (cts./lb.) 3/	48.9	62.0	72.7	66.4	73.8	77.3	74.9	76.9	79.2	83.0
U.S. M 1-3/32 in. (cts./lb.) 4/	64.8	61.8	78.3	69.2	74.1	78.3	74.3	77.0	80.2	84.8
U.S. mill consumpt. (1,000 bales)	6,399	7,452	7,817	7,782	850	551	724	663	728	688
Exports (1,000 bales)	1,989	6,884	6,582	6,148	627	683	875	797	997	—
Stocks, beginning (1,000 bales)	4,102	9,348	5,026	5,771	12,484	12,673	12,670	11,291	9,965	8,240

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Outlook (A) index, average of five lowest prices of 11 selected growths. 4/ Memphis territory growths. — = not available.

Information contact: Scott Sanford (202) 786-1840.

Table 20.—Feed Grains

	Marketing year 1/				1989		1990			
	1985/86	1986/87	1987/88	1988/89	Apr	Dec	Jan	Feb	Mar	Apr
Wholesale prices										
Corn, no. 2 yellow, 30 day, Chicago (\$/bu.)	2.35	1.84	2.14	2.68	2.72	2.34	2.36	2.41	2.50	2.72
Sorghum, no. 2 yellow, Kansas City (\$/cwt)	3.72	2.73	3.40	4.17	4.17	3.98	4.00	3.84	3.48	4.32
Barley, feed, Duluth (\$/bu.) 2/	1.53	1.44	1.78	2.31	2.52	2.23	2.28	2.20	2.27	2.27
Barley, malting, Minneapolis (\$/bu.)	2.24	1.89	2.04	4.11	4.29	3.19	3.20	3.02	2.83	2.97
Exports 3/										
Corn (mil. bu.)	1,241	1,504	1,723	2,038	177	258	239	155	182	194
Feed grains (mil. metric tons) 4/	38.8	46.3	52.3	61.3	5.5	7.3	7.0	4.8	5.8	5.7
	Marketing year 1/				1989		1990			
	1985/86	1986/87	1987/88	1988/89	Dec-Feb	Mar-May	June-Aug	Sept-Nov	Dec-Feb	Mar-May
Corn										
Stocks, beginning (mil. bu.)	1,648	4,040	4,882	4,259	7,072	5,204	3,419	1,930	7,079	4,213
Domestic use										
Feed (mil. bu.)	4,095	4,714	4,805	3,979	1,082	849	690	1,499	1,270	940
Food, seed, ind. (mil. bu.)	1,160	1,192	1,229	1,245	284	337	330	298	295	348
Exports (mil. bu.)	1,241	1,504	1,723	2,038	508	600	470	582	682	828
Total use (mil. bu.)	6,496	7,410	7,757	7,260	1,869	1,787	1,490	2,379	2,223	1,917

1/ September 1 for corn & sorghum; June 1 for oats & barley. 2/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. 3/ Includes products. 4/ Aggregated data for corn, sorghum, oats, & barley. P = preliminary. — not available.

Information contact: James Cole (202) 786-1840.

Table 21.—Fats & Oils

	Marketing year *				1989			1990		
	1985/86	1986/87	1987/88	1988/89	Mar	Nov	Dec	Jan	Feb	Mar
Soybeans										
Wholesale price, no. 1 yellow, Chicago (\$/bu.)	5.20	5.03	6.67	7.41	7.62	5.78	5.74	5.60	5.66	5.85
Crushings (mil. bu.)	1,052.8	1,178.8	1,174.5	1,057.7	93.5	104.1	105.4	107.2	91.8	102.1
Exports (mil. bu.)	740.7	756.9	801.8	530.6	67.9	78.7	65.8	77.4	75.0	88.0
Stocks, beginning (mil. bu.)	318.0	536.4	436.4	302.5	112.0	96.3	108.5	89.7	93.8	91.4
Soybean oil										
Wholesale price, crude, Decatur (cts./lb.)	18.02	15.38	22.67	21.09	22.1	18.7	18.1	19.3	19.3	21.8
Production (mil. lb.)	11,817.3	12,783.1	12,974.5	11,737.0	1,041.2	1,145.7	1,161.2	1,187.4	1,021.7	1,142.4
Domestic disp. (mil. lb.)	10,045.9	10,820.2	10,734.1	10,455.6	937.8	1,045.4	975.2	1,036.9	900.1	1,005.9
Exports (mil. lb.)	1,257.3	1,184.5	1,873.2	1,858.2	112.4	82.5	113.4	85.4	136.2	184.4
Stocks, beginning (mil. lb.)	632.5	946.6	1,725.0	2,092.2	2,902.4	1,514.8	1,532.4	1,604.9	1,717.5	1,702.9
Soybean meal										
Wholesale price, 44% protein, Decatur (\$/ton)	154.88	182.61	221.90	233.48	237.10	183.40	179.4	172.30	181.90	165.10
Production (1,000 ton)	24,951.3	27,758.8	28,000.2	24,942.7	2,218.8	2,492.5	2,519.6	2,548.8	2,170.9	2,432.3
Domestic disp. (1,000 ton)	19,117.2	20,387.4	21,275.9	19,792.5	1,815.8	2,147.4	1,820.8	2,052.4	1,802.9	1,815.8
Exports (1,000 ton)	6,009.3	7,343.0	6,871.0	5,130.8	780.9	371.4	565.1	570.4	560.1	586.8
Stocks, beginning (1,000 ton)	386.9	211.7	240.2	153.5	395.7	220.6	194.3	328.2	254.0	262.0
Margarine, wholesale price, Chicago, white (cts./lb.)	51.2	40.3	40.3	52.3	55.4	52.1	52.4	52.6	53.6	54.2

* Beginning September 1 for soybeans; October 1 for soybean meal & oil; calendar year for margarine.

Information contacts: Roger Hookin (202) 786-1840, Tom Bickerton (202) 786-1824.

Table 22.—Farm Programs, Price Supports, Participation & Payment Rates

	Target price	Loan rate	Findley loan rate	Payment rates			Base acres 1/	Program 2/	Participation rate 3/
				Deficiency	Paid land diversion	PIK			
			\$/bu.			Percent 4/	Mil. acres		Percent of base
Wheat									
1984/85	4.38	3.30	—	1.00	2.70	85	84.0	20/10/10-20	60/60/20
1985/86	4.38	3.30	—	1.08	2.70	—	84.0	20/10/0	73
1986/87 5/	4.38	3.00	2.40	1.98	2.00	110	91.6	22.5/2.5/5-10	85/85/21
1987/88	4.38	2.85	2.28	1.81	—	—	87.6	27.5/0/0	88
1988/89	4.23	2.76	2.21	0.89	—	—	84.8	27.5/0/0	86
1989/90	4.10	2.58	2.06	7/ .32	—	—	82.3	10/0/0	78
1990/91	4.00	2.44	1.95	0.90	—	—	88.5	" 5/0/0	80
			\$/cwt						
Rice									
1984/85	11.90	8.00	—	3.76	—	—	4.1	25/0/0	85
1985/86	11.90	8.00	6/ 3.16	3.90	3.50	—	4.2	20/15/0	90
1986/87 5/	11.90	7.20	6/ 3.82	4.70	—	—	4.2	35/0/0	94
1987/88	11.66	6.84	6/ 5.77	4.82	—	—	4.1	35/0/0	96
1988/89	11.15	6.63	6/ 6.30	4.31	—	—	4.1	25/0/0	94
1989/90	10.80	6.50	6/ 6.50	3.50	—	—	4.1	25/0/0	95
1990/91	10.71	6.50	—	4.06	—	—	4.2	20/0/0	92
			\$/bu.						
Corn									
1984/85	3.03	2.55	—	0.43	—	—	80.8	10/0/0	54
1985/86	3.03	2.55	—	0.48	—	—	84.2	10/0/0	69
1986/87 5/	3.03	2.40	1.92	1.11	—	—	81.7	17.5/2.5/0	88
1987/88	3.03	2.28	1.82	1.09	2.00	—	81.5	20/15/0	90
1988/89	2.93	2.21	1.77	7/ .36	1.75	—	82.9	20/10/0; 0/92	87
1989/90	2.84	2.06	1.65	7/ .64	—	—	82.7	10/0/0; 0/92	81
1990/91	2.75	1.96	1.57	0.90	—	—	82.6	10/0/0; 0/92	76
			\$/bu.						
Sorghum									
1984/85	2.88	2.42	—	0.46	—	—	18.4	8/ (same)	42
1985/86	2.88	2.42	—	0.46	—	—	19.3	—	55
1986/87 5/	2.88	2.28	1.82	1.06	0.65	—	19.0	—	75
1987/88	2.88	2.17	1.74	1.14	1.90	—	17.4	—	84
1988/89	2.78	2.10	1.68	0.48	1.65	—	16.8	—	82
1989/90	2.70	1.96	1.57	7/ .70	—	—	16.2	—	79
1990/91	2.61	1.86	1.49	0.91	—	—	15.4	—	76
			\$/bu.						
Barley									
1984/85	2.60	2.08	—	0.26	—	—	11.6	16/ (same)	44
1985/86	2.60	2.08	—	0.52	—	—	13.3	—	57
1986/87 5/	2.60	1.95	1.56	0.99	0.57	—	12.4	—	72
1987/88	2.60	1.86	1.49	0.79	1.60	—	12.5	—	84
1988/89	2.51	1.80	1.44	0.00	1.40	—	12.5	—	79
1989/90	2.43	1.68	1.34	7/ .23	—	—	12.4	—	69
1990/91	2.38	1.60	1.28	0.26	—	—	11.9	—	66
			\$/bu.						
Oats									
1984/85	1.60	1.31	—	0	—	—	9.8	8/ (same)	14
1985/86	1.60	1.31	—	0.29	—	—	9.4	—	14
1986/87 5/	1.60	1.23	0.99	0.39	0.36	—	9.2	—	37
1987/88	1.60	1.17	0.94	0.20	0.80	—	6.4	—	45
1988/89	1.55	1.13	0.90	11/ 0.00	—	—	7.9	5/0/0; 0/92	30
1989/90	1.50	1.06	0.85	0.00	—	—	7.6	5/0/0; 0/92	23
1990/91	1.45	1.01	0.81	0.00	—	—	7.5	5/0/0; 0/92	10
			\$/bu.						
Soybeans 9/									
1984/85	—	5.02	—	—	—	—	—	—	—
1985/86	—	5.02	—	—	—	—	—	—	—
1986/87 5/	—	4.77	—	—	—	—	—	—	—
1987/88	—	4.77	—	—	—	—	—	—	—
1988/89	—	4.77	—	—	—	—	—	—	—
1989/90	—	4.53	—	—	—	—	—	10/ 10/25	—
			Cts./lb.						
Upland cotton									
1984/85	81.0	55.00	—	18.60	—	—	15.6	25/0/0	70
1985/86	81.0	57.30	—	23.70	30.00	—	15.9	20/10/0	82/0/0
1986/87 5/	81.0	55.00	11/ 44.00	26.00	—	—	15.5	25/0/0	93
1987/88	79.4	52.25	12/ —	17.3	—	—	14.5	25/0/0	93
1988/89	75.9	51.80	12/ —	19.4	—	—	14.5	12.5/0/0	89
1989/90	73.4	50.00	12/ —	13.1	—	—	14.6	25/0/0	89
1990/91	72.9	50.27	12/ —	11.0	—	—	14.4	12.5/0/0	87

1/ Includes planted area plus acres considered planted (ARP, PLD, 0-92 etc). Net of CRP. 2/ Percentage of base acres that farmers participating in Acreage Reduction Programs/Paid Land Diversion/PIK were required to devote to conserving uses to receive program benefits. 3/ Percentage of base acres enrolled in Acreage Reduction Programs/Paid Land Diversion/PIK. 4/ Percent of program yield, except 1986/87 wheat, which is dollars per bushel. 1984 PIK rates apply only to the 10-20 portion. 5/ Rates for payments received in cash were reduced by 4.3 percent in 1986/87 due to Gramm-Rudman-Hollings. 6/ Annual average world market price. 7/ Guaranteed to farmers signed up for 0/92. 8/ The sorghum, oats, & barley programs were the same as for corn in each year except 1988-90, when the oats ARP was lower than for the other feed grains. 9/ There are no target prices, acreage programs, or payment rates for soybeans. 10/ Soybean program data refers to percent of program crop base permitted to shift into beans without loss of base. 11/ Loan repayment rate. 12/ Loans may be repaid at the lower of the loan rate or world market prices. *On September 13, the Secretary announced that participating farmers have the option of planting up to 105 percent of their wheat base to boost 1990 supplies. For every acre planted in excess of 95 percent of base, the acreage used to compute deficiency payments will be cut by 1 acre. — = not available.

Information contact: James Cole (202) 786-1840.

Table 23.—Fruit¹

	1981	1982	1983	1984	1985	1986	1987	1988	1989 P
Citrus 1/									
Production (1,000 ton)	15,105	12,139	13,682	10,832	10,525	11,058	11,994	12,781	13,132
Per capita consumpt. (lbs.) 2/	104.4	109.3	120.0	102.8	109.1	117.3	112.8	113.6	—
Noncitrus 3/									
Production (1,000 tons)	13,332	14,659	14,168	14,301	14,191	13,875	16,012	15,875	16,091
Per capita consumpt. (lbs.) 2/	88.0	89.2	88.7	93.9	91.8	96.4	101.5	97.7	—
	1989				1990				
	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
F.o.b. shipping point prices									
Apples (\$/canton) 4/	11.31	10.49	8.31	—	9.00	8.83	11.00	11.00	11.00
Pears (\$/box) 5/	—	—	11.10	—	11.75	12.00	13.85	14.00	14.00
Grower prices									
Oranges (\$/box) 6/	3.91	5.62	6.22	6.47	5.63	4.70	4.93	5.33	6.60
Grapefruit (\$/box) 6/	5.63	6.10	6.18	5.54	5.18	4.62	4.68	6.23	8.19
Stocks, ending									
Fresh apples (mil. lbs.)	8.0	2,522.0	4,501.9	3,845.8	3,220.8	2,571.7	2,024.6	1,399.6	978.6
Fresh pears (mil. lbs.)	157.9	446.2	436.9	368.8	272.8	200.2	153.0	104.8	63.1
Frozen fruits (mil. lbs.)	850.3	863.9	955.1	909.3	805.2	727.9	661.7	609.0	567.5
Frozen orange juice (mil. lbs.)	946.9	808.4	693.1	667.7	749.6	926.6	1,041.5	1,119.2	1,189.8

1/ 1989 indicated 1988/89 season. 2/ Per capita consumption for total U.S. population, including military consumption of both fresh and processed fruit in fresh weight equivalent. 3/ Calendar year. 4/ Red delicious, Washington, extra fancy, carton tray pack, 125's. 5/ D'Anjou, Washington, standard box wrapped, U.S. no. 1, 135's. 6/ U.S. equivalent on-tree returns. p = preliminary. — = not available.

Information contact: Wynne Napper (202) 786-1885.

Table 24.—Vegetables

	Calendar year									
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Production										
Total vegetables (1,000 cwt)	395,225	392,343	430,795	403,320	457,394	453,771	461,329	465,240	458,149	529,377
Fresh (1,000 cwt) 1/ 3/	179,416	183,456	193,452	185,661	202,608	204,148	215,969	220,537	230,483	240,380
Processed (tons) 2/ 3/	10,790,440	10,444,330	11,867,170	10,887,050	12,739,280	12,481,240	12,268,020	12,235,130	11,383,320	14,450,880
Mushrooms (1,000 lbs.)	469,578	517,146	490,828	561,631	595,681	587,956	614,393	631,819	667,367	—
Potatoes (1,000 cwt)	303,905	340,623	355,131	333,728	362,039	406,609	361,743	389,320	356,438	370,344
Sweetpotatoes (1,000 cwt)	10,953	12,799	14,833	12,083	12,902	14,573	12,368	11,611	10,946	11,499
Dry edible beans (1,000 cwt)	26,728	34,751	25,583	15,520	21,070	22,176	22,886	26,031	19,253	24,333
	1989					1990				
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Shipments										
Fresh (1,000 cwt) 4/	21,699	21,914	15,030	16,605	21,968	17,467	21,552	17,748	19,860	22,467
Potatoes (1,000 cwt)	8,466	10,678	9,005	9,612	12,839	10,389	13,096	10,758	12,095	12,386
Sweetpotatoes (1,000 cwt)	19	167	288	333	789	451	301	255	261	331

1/ Includes fresh production of asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes. 2/ Includes processing production of snap beans, sweet corn, green peas, tomatoes, cucumbers (for pickles), asparagus, broccoli, carrots, & cauliflower. 3/ Asparagus & cucumber estimates were not available for 1982 & 1983. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, & watermelons. — = not available.

Information contacts: Shannon Hamm or Cathy Greens (202) 786-1884.

Table 25.—Other Commodities

	Annual					1989				1990
	1985	1986	1987	1988	1989	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar
Sugar										
Production 1/	5,969	6,257	7,309	7,087	6,827	1,822	677	617	3,709	1,671
Deliveries 1/	8,035	7,788	8,167	8,188	8,309	1,902	2,056	2,161	2,190	1,968
Stocks, ending 1/	3,126	3,225	3,195	3,132	2,933	3,402	2,351	1,224	2,833	3,112
Coffee										
Composite green price N.Y. (cts./lb.)	137.46	185.18	109.14	115.59	95.17	126.67	118.01	72.29	63.70	73.22
Imports, green bean equiv. (mil. lbs.) 2/	2,550	2,596	2,638	2,072	2,630	586	535	784	725	865
	Annual				1989	1990				1990
	1987	1988	1989	Jan	Aug	Sept	Oct	Nov	Dec	Jan
Tobacco										
Prices at auctions 3/										
Flue-cured (\$/lb.)	1.59	1.61	—	—	—	1.74	1.70	1.58	—	—
Burley (\$/lb.)	1.56	1.61	—	1.59	—	—	—	1.67	1.68	1.68
Domestic consumption 4/										
Cigarettes (bil.)	575.0	562.5	540.1	46.9	47.2	44.4	48.2	50.0	34.4	—
Large cigars (mil.)	2,728	2,531	2,487.6	169.4	231.0	216.2	211.4	212.5	187.0	—

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Net imports of green & processed coffee. 3/ Crop year July-June for flue-cured, Oct.-Sept. for burley. 4/ Taxable removals. — = not available.

Information contacts: sugar, Peter Buzzanell (202) 786-1888, coffee, Fred Gray (202) 786-1888, tobacco, Verner Gries (202) 786-1890.

World Agriculture

Table 26.—World Supply & Utilization of Major Crops, Livestock, & Products

	1984/85	1985/86	1986/87	1987/88	1988/89 P	1989/90 P	1990/91 F
	Million units						
Wheat							
Area (hectares)	231.2	229.8	228.2	219.9	218.0	225.7	
Production (metric tons)	511.9	500.1	530.7	501.5	500.8	534.8	568.2
Exports (metric tons) 1/	107.0	85.0	90.7	105.0	96.9	96.9	101.0
Consumption (metric tons) 2/	493.0	496.2	522.5	530.5	531.3	537.9	554.1
Ending stocks (metric tons) 3/	164.0	168.3	176.4	147.5	117.0	113.9	127.9
Coarse grains							
Area (hectares)	334.6	341.3	337.3	323.6	325.1	323.0	
Production (metric tons)	815.8	842.7	833.7	792.3	728.6	799.7	820.5
Exports (metric tons) 1/	100.4	83.2	83.7	83.2	94.5	101.5	95.1
Consumption (metric tons) 2/	782.8	778.4	807.9	813.3	796.7	829.5	827.3
Ending stocks (metric tons) 3/	143.9	208.2	234.0	213.0	144.9	115.1	108.4
Rice, milled							
Area (hectares)	144.1	144.6	145.1	141.4	145.3	146.3	
Production (metric tons)	318.8	318.8	318.3	313.7	330.2	341.0	340.1
Exports (metric tons) 4/	11.4	12.6	12.9	11.9	15.2	13.2	13.3
Consumption (metric tons) 2/	310.6	319.5	322.8	319.6	328.1	334.6	340.0
Ending stocks (metric tons) 3/	54.9	54.9	50.8	44.9	47.0	53.3	53.4
Total grains							
Area (hectares)	709.9	715.5	710.6	684.9	688.4	695.0	
Production (metric tons)	1,646.5	1,661.6	1,682.7	1,607.5	1,559.6	1,675.5	1,728.8
Exports (metric tons) 1/	218.8	180.8	187.3	200.1	206.6	211.6	209.4
Consumption (metric tons) 2/	1,586.2	1,594.1	1,653.2	1,663.4	1,650.1	1,702.8	1,721.4
Ending stocks (metric tons) 3/	362.8	431.4	481.2	405.4	308.9	282.3	289.7
Oilseeds							
Crush (metric tons)	150.7	155.1	161.4	167.7	165.7	171.3	
Production (metric tons)	191.1	196.2	194.4	209.6	202.9	211.0	222.0
Exports (metric tons)	33.1	34.5	37.7	39.6	32.0	34.1	
Ending stocks (metric tons)	21.1	26.8	23.5	24.0	22.1	22.8	
Meals							
Production (metric tons)	101.8	105.0	110.5	115.1	111.8	116.1	
Exports (metric tons)	32.3	34.4	36.7	36.3	38.2	38.5	
Oils							
Production (metric tons)	46.2	49.4	50.3	53.1	53.6	56.2	
Exports (metric tons)	15.6	16.4	16.9	17.7	18.4	19.3	
Cotton							
Area (hectares)	33.9	31.9	29.9	31.1	34.0	32.6	
Production (bales)	88.2	79.6	70.4	81.2	84.5	79.0	88.0
Exports (bales)	20.2	20.2	26.0	23.1	25.8	24.9	25.0
Consumption (bales)	70.0	75.8	82.5	84.1	85.6	85.9	87.0
Ending stocks (bales)	42.4	47.2	35.2	32.4	30.8	23.9	24.6
	1984	1985	1986	1987	1988	1989 P	1990 F
Red meat							
Production (metric tons)	99.8	103.7	106.7	109.7	113.3	114.6	114.1
Consumption (metric tons)	97.8	101.6	105.4	107.9	111.5	113.0	112.2
Exports (metric tons) 1/	6.0	6.4	6.7	6.7	6.9	6.9	7.2
Poultry							
Production (metric tons)	25.2	26.2	27.4	29.3	30.2	31.3	32.7
Consumption (metric tons)	25.0	25.8	27.0	28.7	29.8	30.9	32.1
Exports (metric tons) 1/	1.3	1.2	1.3	1.5	1.7	1.7	1.8
Dairy							
Milk production (metric tons)	413.0	413.4	419.0	427.1	429.8	431.3	437.2

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years & do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1985 data correspond with 1984/85, etc. P = preliminary. F = forecast.

Information contacts: Crops, Frederic Suris (202) 786-1824; red meat & poultry, Linda Bailey (202) 786-1286; dairy, Sara Short (202) 786-1769.

U.S. Agricultural Trade

Table 27.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1989			1990			
	1987	1988	1989	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Export commodities										
Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	3.11	3.97	4.65	4.79	4.57	4.62	4.59	4.41	4.28	4.40
Corn, f.o.b. vessel, Gulf ports (\$/bu.)	1.95	2.73	2.85	2.95	2.79	2.79	2.70	2.71	2.80	3.02
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu.)	1.88	2.52	2.70	2.76	2.64	2.65	2.80	2.59	2.64	2.79
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	5.55	7.81	7.06	7.61	6.18	6.22	6.07	6.05	6.16	6.24
Soybean oil, Decatur (cts./lb.)	15.85	23.52	20.21	21.88	19.51	19.10	19.55	20.54	22.92	23.20
Soybean meal, Decatur (\$/ton)	175.57	234.75	216.59	220.90	183.76	179.82	171.66	161.80	164.34	168.85
Cotton, 8-market avg. spot (cts./lb.)	64.35	57.25	63.78	61.43	68.28	63.56	62.21	65.03	68.08	71.31
Tobacco, avg. price at auction (cts./lb.)	137.41	153.61	151.56	141.45	160.89	161.23	160.77	160.54	160.54	164.68
Rice, f.o.b. mill, Houston (\$/cwt)	13.15	19.60	15.68	15.00	16.00	15.67	15.50	15.69	16.25	16.25
Inedible tallow, Chicago (cts./lb.)	13.79	16.64	14.71	14.60	14.75	14.25	14.87	14.50	14.47	13.77
Import commodities										
Coffee, N.Y. spot (\$/lb.)	1.09	1.21	1.04	1.33	0.72	0.70	0.72	0.76	0.85	0.84
Rubber, N.Y. spot (cts./lb.)	50.65	59.20	50.65	55.23	45.64	44.82	44.72	45.75	45.91	45.64
Cocoa beans, N.Y. (\$/lb.)	0.87	0.69	0.55	0.58	0.44	0.42	0.44	0.45	0.50	0.59

Information contact: Mary Teymourian (202) 786-1824.

Table 28.—Indexes of Real Trade-Weighted Dollar Exchange Rates¹

	1989					1990				
	Aug	Sept	Oct P	Nov P	Dec P	Jan P	Feb P	Mar P	Apr P	May P
	1985 = 100									
Total U.S. trade 2/	72.8	73.9	71.7	71.0	69.4	67.8	67.3	68.6	68.1	67.6
Agricultural trade										
U.S. markets	80.8	81.4	79.8	79.8	79.2	79.0	78.8	80.0	80.2	80.3
U.S. competitors 3/	85.7	85.2	83.7	82.4	88.3	85.5	85.4	85.3	84.7	84.4
Wheat										
U.S. markets	91.9	92.0	90.8	91.4	93.4	93.9	93.3	93.8	93.8	93.8
U.S. competitors 3/	84.3	83.6	81.8	80.4	84.6	79.6	80.5	80.1	79.0	78.6
Soybeans										
U.S. markets	72.9	73.8	72.0	71.8	70.3	69.7	69.4	71.0	71.1	71.0
U.S. competitors 3/	97.0	92.4	89.5	85.3	127.1	104.4	102.8	101.1	101.1	101.5
Corn										
U.S. markets	74.0	74.8	73.3	73.7	73.2	73.4	73.3	75.1	75.8	76.2
U.S. competitors 3/	94.7	92.4	89.0	88.4	101.2	85.1	85.0	85.8	85.3	85.0
Cotton										
U.S. markets	76.4	77.1	76.1	76.4	76.1	76.5	76.6	78.2	78.7	79.1
U.S. competitors	85.8	84.0	81.3	79.9	80.8	80.0	79.6	79.1	78.0	77.4

1/ Real indexes adjust nominal exchange rates for differences in rates of inflation, to avoid the distortion caused by high-inflation countries. A higher value means the dollar has appreciated. See the October 1988 issue of Agricultural Outlook for a discussion of the calculations and the weights used. 2/ Federal Reserve Board Index of trade-weighted value of the U.S. dollar against 10 major currencies. Weights are based on relative importance in world financial markets. 3/ Substantial devaluations of the Argentine austral & Brazilian cruzado resulted in a sharp increase in the December, 1989, & subsequent values of these indices. P = preliminary.

Information contact: Tim Baxter, David Stallings (202) 786-1706.

Table 29.—Trade Balance

	Fiscal year 1/								Mar
	1983	1984	1985	1986	1987	1988	1989 F	1990 F	1990
	\$ million								
Exports									
Agricultural	34,769	38,027	31,201	26,312	27,876	35,379	39,651	40,000	4,038
Nonagricultural	159,373	170,014	179,236	179,291	202,911	258,593	302,507	—	30,073
Total 2/	194,142	208,041	210,437	205,603	230,787	293,972	342,158	—	34,111
Imports									
Agricultural	16,373	18,916	19,740	20,884	20,650	21,014	21,479	22,000	2,143
Nonagricultural	230,527	297,736	313,722	342,846	367,374	409,138	441,072	—	39,368
Total 3/	246,900	316,652	333,462	363,730	388,024	430,152	462,551	—	41,511
Trade balance									
Agricultural	18,396	19,111	11,461	5,428	7,226	14,365	18,172	18,000	1,895
Nonagricultural	-71,154	-127,722	-134,486	-163,555	-184,463	-150,545	-138,585	—	-9,295
Total	-52,758	-108,611	-123,025	-158,127	-157,237	-136,180	-120,393	—	-7,400

1/ Fiscal years begin October 1 & end September 30. Fiscal year 1989 began Oct. 1, 1988 & ended Sept. 30, 1989. 2/ Domestic exports including Department of Defense shipments (F.A.S. value). 3/ Imports for consumption (customs value). F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 786-1822.

Table 30.—U.S. Agricultural Exports & Imports

	Fiscal year*			Mar	Fiscal year*			Mar
	1988	1989	1990 F	1990	1988	1989	1990 F	1990
	1,000 units				\$ million			
EXPORTS								
Animals, live (no.) 1/	430	758	—	60	452	475	—	26
Meats & preps., excl. poultry (mt)	631	869	0	74	1,797	2,355	—	225
Dairy products (mt)	388	594	—	4	538	475	400	26
Poultry meats (mt)	390	466	600	54	424	514	—	60
Fats, oils, & greases (mt)	1,362	1,377	3/1,300	124	545	531	—	46
Hides & skins incl. furskins	—	—	—	—	1,837	1,713	—	176
Cattle hides, whole (no.) 1/	20,817	26,280	—	2,373	1,458	1,360	—	127
Mink pelts (no.) 1/	2,455	3,073	—	740	88	91	—	18
Grains & feeds (mt)	108,944	114,976	—	10,432	12,569	16,837	4/16,300	1,484
Wheat (mt)	40,517	37,702	32,000	2,855	4,469	6,006	5/5,100	457
Wheat flour (mt)	1,236	1,268	1,200	86	170	266	—	21
Rice (mt)	2,173	3,052	2,400	255	731	955	800	85
Feed grains, incl. products (mt)	53,117	61,094	67,200	5,823	5,193	7,379	7,900	654
Feeds & fodders (mt)	11,255	11,071	6/11,500	1,294	1,720	1,848	—	216
Other grain products (mt)	910	1,197	—	152	362	513	—	59
Fruits, nuts, and preps. (mt)	2,409	2,555	—	233	2,368	2,394	—	212
Fruit juices incl.	—	—	—	—	—	—	—	—
froz. (1,000 hectoliters) 1/	5,497	4,997	—	474	252	264	—	28
Vegetables & preps. (mt)	1,821	2,482	—	201	1,280	1,548	—	199
Tobacco, unmanufactured (mt)	229	212	200	26	1,297	1,274	1,300	168
Cotton, excl. linters (mt)	1,388	1,441	1,800	217	2,136	2,039	2,900	346
Seeds (mt)	286	514	—	50	415	500	600	54
Sugar, cane or beet (mt)	318	368	—	34	98	134	—	15
Oilseeds & products (mt)	29,688	21,090	—	3,097	7,758	6,624	5,900	758
Oilseeds (mt)	21,601	14,775	—	2,435	5,295	4,400	—	562
Soybeans (mt)	21,142	14,088	18,800	2,376	5,066	4,079	3,700	535
Protein meal (mt)	6,389	4,816	4,100	531	1,501	1,317	900	114
Vegetable oils (mt)	1,699	1,498	—	131	962	908	—	82
Essential oils (mt)	9	13	—	1	120	171	—	15
Other	610	612	—	138	1,495	1,805	—	202
Total	148,473	147,569	150,000	14,885	35,379	39,651	40,000	4,038
IMPORTS								
Animals, live (no.) 1/	2,238	2,484	—	270	729	740	800	93
Meats & preps., excl. poultry (mt)	1,280	1,092	—	102	2,788	2,433	—	255
Beef & veal (mt)	779	668	725	66	1,681	1,527	1,800	162
Pork (mt)	458	371	345	31	1,001	778	800	82
Dairy products (mt)	232	211	300	16	881	834	800	62
Poultry & products 1/	—	—	—	—	97	130	—	10
Fats, oils, & greases (mt)	20	14	—	2	19	14	—	1
Hides & skins, incl. furskins 1/	—	—	—	—	247	240	—	14
Wool, unmanufactured (mt)	58	62	—	3	292	319	—	10
Grains & feeds (mt)	3,075	3,468	3,500	234	868	1,139	1,100	86
Fruits, nuts, & preps., excl. juices (mt)	4,797	5,036	5,100	597	2,169	2,269	—	284
Bananas & plantains (mt)	3,030	3,039	3,050	284	820	851	900	81
Fruit juices (1,000 hectoliters) 1/	26,756	27,778	30,000	2,363	768	793	—	77
Vegetables & preps. (mt)	2,518	2,953	3,100	304	1,593	1,959	2,300	308
Tobacco, unmanufactured (mt)	217	169	180	16	611	521	500	47
Cotton, unmanufactured (mt)	36	13	—	7	9	8	—	3
Seeds (mt)	143	158	170	47	153	187	200	27
Nursery stock & cut flowers 1/	—	—	—	—	419	466	—	40
Sugar, cane or beet (mt)	1,078	1,630	—	204	372	620	—	88
Oilseeds & products (mt)	1,772	1,917	1,950	125	838	946	900	63
Oilseeds (mt)	208	424	—	35	71	159	—	15
Protein meal (mt)	253	359	—	20	42	65	—	3
Vegetable oils (mt)	1,311	1,133	—	69	725	721	—	45
Beverages excl. fruit	—	—	—	—	—	—	—	—
juices (1,000 hectoliters) 1/	15,583	13,967	—	995	2,008	1,815	—	136
Coffee, tea, cocoa, spices	1,841	1,868	—	236	4,274	3,896	—	352
Coffee, incl. products (mt)	1,050	1,084	1,250	145	2,600	2,467	2,300	221
Cocoa beans & products (mt)	562	564	565	70	1,164	969	900	89
Rubber & allied gums (mt)	846	927	850	82	949	1,051	800	69
Other	—	—	—	—	931	1,097	—	116
Total	—	—	—	—	21,014	21,479	22,000	2,143

* Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1989 began Oct. 1, 1988 & ended Sept. 30, 1989. 1/ Not included in total volume. 2/ Forecasts for footnoted items 2/—6/ are based on slightly different groups of commodities. Fiscal 1988 exports of categories used in the 1989 forecasts were 2/ 561,000 m. tons. 3/ 1.347 million dollars. 4/ 12,743 million. 5/ 4,638 million, i.e. includes flour. 6/ 11,095 million m. tons. F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 786-1822.

Table 31.—U.S. Agricultural Exports by Region

Region & country	Fiscal year*			Mar	Change from year* earlier			Mar
	1988	1989	1990 F	1990	1988	1989	1990 F	1990
	\$ million				Percent			
WESTERN EUROPE	8,053	7,067	6,900	885	12	-12	-3	12
European Community (EC-12)	7,536	6,558	6,400	827	11	-13	-3	12
Belgium-Luxembourg	429	431	—	25	1	1	—	-51
France	563	474	—	41	14	-16	—	-31
Germany, Fed. Rep.	1,315	918	—	153	4	-30	—	88
Italy	713	603	—	74	-3	-16	—	47
Netherlands	2,103	1,847	—	222	8	-12	—	-1
United Kingdom	818	738	—	71	23	-10	—	2
Portugal	340	307	—	41	25	-10	—	-14
Spain, Incl. Canary Islands	848	876	—	154	29	3	—	32
Other Western Europe	516	510	500	59	20	-1	0	17
Switzerland	191	166	—	21	32	-13	—	25
EASTERN EUROPE	559	422	600	66	23	-24	50	13
German Dem. Rep.	67	72	—	11	0	8	—	3,134
Poland	167	45	—	2	165	-73	—	-47
Yugoslavia	104	76	—	1	-21	-26	—	-95
Romania	93	62	—	43	-19	-33	—	298
USSR	1,940	3,299	3,200	326	194	70	-3	-38
ASIA	15,944	18,685	18,500	1,764	33	17	-11	-3
West Asia (Mideast)	1,904	2,270	2,300	236	14	19	0	27
Turkey	120	238	—	38	3	97	—	162
Iraq	735	791	700	112	39	8	-13	82
Israel	334	265	—	17	37	-21	—	-27
Saudi Arabia	464	462	500	43	-5	4	0	4
South Asia	805	1,171	—	52	133	45	—	-46
Bangladesh	107	213	—	3	-3	98	—	-85
India	354	243	—	14	281	-31	—	0
Pakistan	276	609	500	25	181	121	-17	-61
China	613	1,494	900	73	161	144	-40	-55
Japan	7,274	8,152	8,300	759	31	12	1	-7
Southeast Asia	1,022	974	—	142	44	-5	—	60
Indonesia	245	216	—	33	61	-12	—	218
Philippines	345	344	400	34	33	0	33	-18
Other East Asia	4,326	4,623	4,900	502	24	7	6	6
Taiwan	1,577	1,594	1,600	158	16	1	-6	-1
Korea, Rep.	2,259	2,453	2,700	278	33	9	8	7
Hong Kong	488	575	600	66	12	18	0	21
AFRICA	2,272	2,281	2,400	216	27	0	4	32
North Africa	1,659	1,798	2,000	177	30	8	11	41
Morocco	193	216	—	13	-2	12	—	108
Algeria	537	549	700	49	120	2	40	35
Egypt	786	955	800	112	3	21	-20	50
Sub-Saharan	613	483	400	39	21	-21	-20	2
Nigeria	44	30	—	2	-35	-31	—	27
Rep. S. Africa	85	57	—	7	74	-34	—	-38
LATIN AMERICA & CARIBBEAN	4,401	5,442	5,000	403	17	24	-7	-11
Brazil	176	152	100	6	-58	-13	-33	140
Caribbean Islands	867	1,007	—	77	5	16	—	-14
Central America	414	448	—	41	10	8	—	-12
Colombia	178	139	—	8	55	-22	—	26
Mexico	1,726	2,757	2,500	227	42	60	11	-4
Peru	174	81	—	10	24	-54	—	81
Venezuela	597	587	200	16	30	-2	-66	-51
CANADA	1,973	2,187	3,100	357	11	11	40	81
OCEANIA	237	268	300	21	3	13	0	-5
Total	35,379	39,651	40,000	4,038	27	12	1	0
Developed countries	17,905	18,000	18,800	2,041	19	1	4	10
Less developed countries	14,362	16,436	16,500	1,532	25	14	1	7
Centrally planned countries	3,111	5,215	4,700	465	131	68	-10	-38

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1989 began Oct. 1, 1988 & ended Sept. 30, 1989. F = forecast. — = not available.
 Note: Adjusted for transshipments through Canada.

Information contact: Stephen MacDonald (202) 786-1822.

Farm Income

Table 32.—Farm Income Statistics

	Calendar year										
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989 F	1990 F
	\$ billion										
1. Farm receipts	142.0	144.1	147.1	141.1	146.8	149.1	140.6	145.3	157.2	164	167 to 175
Crops (incl. net CCC loans)	71.7	72.5	72.3	67.1	69.5	74.3	64.0	63.8	72.6	74	77 to 81
Livestock	68.0	69.2	70.3	69.4	73.0	69.6	71.5	75.7	78.9	84	84 to 87
Farm related 1/	2.3	2.5	4.5	4.5	4.4	5.0	5.1	5.8	5.7	6	5 to 7
2. Direct Government payments	1.3	1.9	3.5	9.3	8.4	7.7	11.8	16.7	14.5	11	8 to 10
Cash payments	1.3	1.9	3.5	4.1	4.0	7.6	8.1	6.6	7.1	9	8 to 9
Value of PIK commodities	0.0	0.0	0.0	5.2	4.5	0.1	3.7	10.1	7.4	2	0 to 1
3. Total gross farm income (4+5+6) 2/	149.3	166.4	163.5	153.1	174.9	166.4	160.4	171.6	177.6	191	191 to 197
4. Gross cash income (1+2)	143.3	146.0	150.6	150.4	155.2	156.9	152.5	162.0	171.6	175	176 to 183
5. Nonmoney income 3/	12.3	13.8	14.3	13.5	13.4	11.8	10.6	10.0	10.3	10	9 to 11
6. Value of inventory change	-6.3	6.6	-1.4	-10.9	6.3	-2.4	-2.7	-0.4	-4.3	6	2 to 6
7. Cash expenses 4/	109.1	113.2	112.8	113.5	116.6	110.2	100.7	107.5	114.4	121	121 to 124
8. Total expenses	133.1	139.4	140.0	140.4	142.7	134.0	122.4	128.0	135.0	142	142 to 147
9. Net cash income (4-7)	34.2	32.8	37.8	36.9	38.6	46.7	51.8	54.5	57.2	54	55 to 59
10. Net farm income (3-8)	16.1	26.9	23.5	12.7	32.2	32.4	38.0	43.6	42.7	49	47 to 51
Deflated (1982\$)	18.8	28.6	23.5	12.2	29.9	29.2	33.4	37.2	35.2	38	36 to 40
11. Off-farm income	34.7	35.8	36.4	37.0	38.9	42.6	44.6	46.8	51.7	54	56 to 58
12. Loan charges 5/ Real estate	9.9	9.1	3.8	2.3	-1.1	-6.0	-9.0	-7.5	-4.4	-2	-2 to 0
13. 5/ Non-real estate	5.3	6.5	3.4	0.9	-0.8	-9.6	-11.0	-4.6	-0.3	0	0 to 2
14. Rental income plus monetary change	6.1	6.4	6.3	5.3	8.9	8.8	7.8	6.8	8.5	8	7 to 9
15. Capital expenditures 5/	18.0	16.8	13.3	12.7	12.5	9.2	8.5	9.8	10.2	12	10 to 14
16. Net cash flow (9+12+13+14-15)	37.6	37.8	38.1	32.7	33.1	30.7	31.2	39.4	50.8	48	49 to 57

1/ Income from machine hire, custom work, sales of forest products, & other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food & imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, & farm household expenses. 1987 & 1988 expenses include preliminary revisions from the 1987 Census of Agriculture. 5/ Excludes farm households. Totals may not add because of rounding. F = forecast.

Information contact: Diane Bertelsen (202) 786-1808.

Table 33.—Balance Sheet of the U.S. Farming Sector

	Calendar year 1/ 2/										
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989 F	1990 F
	\$ billion										
Assets											
Real estate	782.4	784.7	748.8	758.2	671.3	599.3	558.7	584.8	615.1	636	650 to 660
Non-real estate	207.2	202.8	202.8	196.9	203.1	191.4	188.2	198.6	13.0	217	210 to 220
Livestock & poultry	60.6	53.5	53.0	49.5	49.5	46.3	47.8	58.0	65.6	70	68 to 72
Machinery & motor vehicles	87.1	92.2	92.6	92.2	91.1	88.5	88.3	84.5	85.4	87	86 to 89
Crops stored 3/	33.0	29.1	27.7	23.9	29.7	23.6	19.1	20.9	26.2	24	21 to 25
Financial assets	26.5	28.9	29.5	31.3	32.6	33.0	35.2	35.2	35.9	36	36 to 38
Total farm assets	989.6	987.5	951.6	955.1	874.3	790.6	747.1	783.4	828.1	853	970 to 880
Liabilities											
Real estate debt 4/	89.6	98.7	102.5	104.8	103.6	97.6	88.6	81.1	76.7	74	71 to 75
Non-real estate debt 5/	77.1	63.6	67.0	67.9	87.1	77.5	66.6	62.0	61.7	61	60 to 64
Total farm debt	166.8	162.3	169.5	192.7	190.7	175.1	155.1	143.1	138.4	136	132 to 138
Total farm equity	822.8	825.2	782.1	762.4	683.6	615.5	591.9	640.3	689.7	717	735 to 745
	Percent										
Selected ratios											
Debt-to-assets	16.9	18.5	19.9	20.2	21.8	22.1	20.8	18.3	16.7	16	15 to 16
Debt-to-equity	20.3	22.6	24.9	25.3	27.9	28.5	26.2	22.3	20.1	19	18 to 19
Debt-to-net cash income	488	556	497	523	493	375	299	248	242	251	230 to 240

1/ As of Dec. 31. 2/ Estimates of farm assets and equity for 1987-1990 reflect revisions in real estate assets based on the 1987 Census of Agriculture. Revisions in real estate assets for 1983-1986 have not been completed. 3/ Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 4/ Excludes debt on operator dwellings, but includes CCC storage and drying facilities loans. 5/ Excludes debt for nonfarm purposes. F = forecast.

Information contacts: Ken Erickson or Jim Ryan (202) 786-1798.

Table 34.—Cash Receipts From Farm Marketings, by State

Region & State	Livestock & products				Crops 1/				Total 1/			
	1988	1989	Feb 1990	Mar 1990	1988	1989	Feb 1990	Mar 1990	1988	1989	Feb 1990	Mar 1990
\$ million 2/												
NORTH ATLANTIC												
Maine	216	223	17	19	188	234	25	29	404	457	42	49
New Hampshire	60	60	6	8	77	77	5	7	137	138	11	12
Vermont	352	375	32	34	53	52	2	6	405	426	35	40
Massachusetts	105	105	9	10	297	303	11	16	402	408	20	26
Rhode Island	13	13	1	1	65	66	3	4	78	79	4	6
Connecticut	180	183	16	18	202	217	12	16	382	400	28	36
New York	1,781	1,917	151	172	824	762	48	61	2,605	2,699	198	233
New Jersey	192	192	16	17	450	435	19	30	642	627	35	47
Pennsylvania	2,348	2,566	209	228	935	977	74	86	3,284	3,542	263	315
NORTH CENTRAL												
Ohio	1,604	1,747	143	151	2,025	2,026	117	153	3,629	3,775	260	304
Indiana	1,749	1,886	148	176	2,367	2,483	144	158	4,117	4,372	292	335
Illinois	2,243	2,310	174	203	4,218	4,488	322	485	6,461	6,796	496	668
Michigan	1,206	1,293	106	116	1,464	1,592	95	116	2,670	2,885	201	231
Wisconsin	4,281	4,573	352	380	767	909	45	48	5,048	5,481	397	428
Minnesota	3,364	3,629	303	319	2,743	2,863	116	175	6,107	6,492	418	493
Iowa	5,045	5,181	454	461	4,029	3,982	196	311	9,074	9,164	650	772
Missouri	2,011	2,152	155	201	1,814	1,750	88	105	3,828	3,903	241	306
North Dakota	849	871	53	49	1,574	1,467	84	127	2,423	2,338	137	177
South Dakota	1,965	2,019	163	182	945	907	47	77	2,911	2,928	210	238
Nebraska	6,336	6,562	534	466	2,643	2,909	184	237	7,979	8,470	718	703
Kansas	4,265	4,498	382	415	2,329	2,107	99	126	6,594	6,605	481	541
SOUTHERN												
Delaware	444	499	44	41	149	159	7	7	592	658	51	48
Maryland	768	828	91	98	459	483	23	26	1,226	1,311	114	126
Virginia	1,294	1,404	82	107	592	596	26	35	1,886	2,000	107	142
West Virginia	179	179	15	20	70	81	4	3	248	240	19	23
North Carolina	2,179	2,350	177	221	1,994	2,026	42	60	4,173	4,377	219	281
South Carolina	488	501	41	50	590	591	20	27	1,078	1,092	81	76
Georgia	2,011	2,184	185	200	1,533	1,554	47	65	3,544	3,738	232	266
Florida	1,114	1,182	98	111	4,697	4,285	409	366	5,811	5,467	506	477
Kentucky	1,538	1,601	92	123	992	1,111	80	65	2,530	2,711	172	186
Tennessee	1,080	1,110	81	95	965	912	47	40	2,046	2,022	128	135
Alabama	1,695	1,886	148	187	706	701	27	39	2,400	2,568	174	225
Mississippi	1,176	1,275	99	116	1,164	1,054	69	58	2,341	2,330	168	174
Arkansas	2,278	2,494	175	229	1,696	1,531	89	86	3,974	4,025	264	315
Louisiana	587	596	43	51	1,299	1,090	75	44	1,885	1,685	118	95
Oklahoma	2,284	2,428	133	238	1,127	1,154	35	49	3,410	3,582	167	287
Texas	6,498	6,792	524	601	3,783	4,099	283	257	10,281	10,892	806	859
WESTERN												
Montana	616	853	67	70	570	693	56	62	1,386	1,546	123	132
Idaho	1,033	1,097	94	97	1,258	1,642	90	121	2,291	2,739	184	218
Wyoming	575	618	37	50	156	170	7	7	730	768	44	57
Colorado	2,655	2,747	228	232	1,037	1,265	65	85	3,692	4,013	291	317
New Mexico	910	924	48	61	362	413	16	18	1,272	1,337	62	99
Arizona	793	718	66	67	1,167	1,125	52	110	1,959	1,842	138	177
Utah	537	555	40	49	150	156	9	13	687	711	49	62
Nevada	150	151	13	12	79	87	7	10	229	238	19	22
Washington	1,141	1,211	109	121	2,146	2,309	128	145	3,287	3,520	237	266
Oregon	669	698	48	62	1,427	1,523	71	91	2,096	2,221	119	153
California	4,704	5,470	389	437	11,894	12,251	668	785	16,598	17,721	1,057	1,222
Alaska	10	10	1	1	20	21	1	1	30	31	2	2
Hawaii	69	69	7	8	479	454	36	40	568	542	43	48
UNITED STATES	78,862	83,786	6,613	7,379	72,569	74,142	4,219	5,071	151,431	157,928	10,832	12,450

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period. 2/ Estimates as of end of current month. Totals may not add because of rounding.

Information contact: Roger Strickland (202) 786-1804.

Table 35.—Cash Receipts From Farming

	Annual						1989			1990		
	1984	1985	1986	1987	1988	1989	Mar	Nov	Dec	Jan	Feb	Mar
	\$ million											
Farm marketings & CCC loans ^a	142,439	144,135	135,539	139,468	151,431	157,928	11,514	16,600	13,730	14,724	10,832	12,450
Livestock & products	72,968	69,845	71,534	75,717	78,862	83,786	6,837	7,817	6,848	7,519	6,613	7,379
Meat animals	40,832	38,589	39,122	44,276	45,975	47,675	3,892	4,510	3,617	4,233	3,748	4,172
Dairy products	17,944	18,063	17,753	17,710	17,668	19,338	1,568	1,770	1,920	1,823	1,585	1,716
Poultry & eggs	12,223	11,211	12,661	11,480	12,864	14,471	1,221	1,219	1,164	1,287	1,137	1,331
Other	1,969	1,982	1,997	2,252	2,354	2,302	156	309	145	176	142	160
Crops	69,471	74,290	64,005	63,751	72,569	74,142	4,677	8,783	6,883	7,206	4,219	5,071
Food grains	9,740	8,993	6,638	5,581	7,700	8,114	357	650	579	791	437	433
Feed crops	15,688	22,520	17,161	13,102	15,291	16,781	1,151	1,848	1,698	2,083	1,107	1,368
Cotton (lint & seed)	3,674	3,687	3,605	4,087	4,668	5,027	69	1,115	828	509	311	259
Tobacco	2,813	2,722	1,918	1,827	2,039	2,153		311	184	340	52	
Oil-bearing crops	13,641	12,474	10,571	11,159	13,699	12,211	797	1,713	1,071	1,448	456	757
Vegetables & melons	9,138	8,558	8,826	9,718	9,819	10,456	921	559	489	718	694	857
Fruits & tree nuts	6,733	6,957	7,246	8,257	8,877	8,757	476	1,054	828	561	419	366
Other	6,085	8,381	9,041	10,020	10,476	10,842	905	1,533	1,209	757	743	1,030
Government payments	8,430	7,704	11,813	16,747	14,480	10,887	1,345	1,066	649	338	1,045	2,331
Total	150,869	151,839	147,352	156,215	165,911	168,815	12,859	17,666	14,379	15,062	11,877	14,781

^a Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information contact: Roger Strickland (202) 786-1804.

Table 36.—Farm Production Expenses

	Calendar year											
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989 F	1990 F	
	\$ million											
Feed	20,971	20,855	18,592	21,725	19,852	18,015	16,179	18,898	22,462	24,000	21,000	to 25,000
Livestock	10,670	8,999	9,684	8,814	9,498	8,958	9,744	11,845	12,812	13,000	12,000	to 15,000
Seed	3,220	3,428	3,172	2,993	3,448	3,350	2,884	3,009	3,138	4,000	3,000	to 5,000
Farm-origin inputs	34,861	33,282	31,448	33,532	32,798	30,323	28,907	33,752	38,412	41,000	38,000	to 42,000
Fertilizer	9,491	9,409	8,018	7,067	7,429	7,258	5,787	6,210	7,000	8,000	7,000	to 9,000
Fuels & oils	7,879	8,570	7,888	7,503	7,143	6,584	4,790	5,042	5,144	6,000	5,000	to 7,000
Electricity	1,526	1,747	2,041	2,146	2,166	2,150	1,842	2,393	2,572	3,000	2,000	to 4,000
Pesticides	3,539	4,201	4,282	4,164	4,767	4,994	4,484	4,588	4,716	5,000	5,000	to 6,000
Manufactured inputs	22,435	23,927	22,229	20,870	21,505	20,988	17,003	18,233	19,432	22,000	21,000	to 24,000
Short-term interest	8,717	10,722	11,349	10,615	10,396	8,821	7,795	7,305	7,287	8,000	7,000	to 8,000
Real estate interest 1/	7,544	9,142	10,481	10,815	10,733	9,878	9,131	8,187	7,885	7,000	6,000	to 8,000
Total interest charges	16,261	19,864	21,830	21,430	21,129	18,699	16,926	15,492	15,172	15,000	14,000	to 16,000
Repair & maintenance 1/ 2/	7,075	7,021	6,428	6,529	6,416	6,370	6,426	6,546	6,858	7,000	7,000	to 8,000
Contract & hired labor	9,293	8,931	10,075	9,725	9,729	9,799	9,890	10,821	11,202	11,000	10,000	to 12,000
Machine hire & custom work	1,823	1,984	2,025	1,896	2,170	2,184	1,810	1,956	2,171	2,000	2,000	to 3,000
Marketing, storage, & transportation	3,070	3,523	4,301	3,904	4,012	4,127	3,852	3,823	3,279	4,000	4,000	to 5,000
Misc. operating expenses 1/	6,881	6,909	7,262	9,089	9,106	8,232	7,993	8,308	8,809	9,000	9,000	to 10,000
Other operating expenses	28,142	28,368	30,089	31,143	31,433	30,712	29,771	31,452	32,319	34,000	33,000	to 37,000
Capital consumption 1/	21,474	23,673	24,287	23,873	23,105	20,847	18,918	17,864	17,722	18,000	18,000	to 20,000
Taxes 1/	3,891	4,246	4,036	4,469	4,059	4,231	4,125	4,345	4,378	4,000	4,000	to 5,000
Net rent to nonoperator landlord	6,075	6,184	6,059	5,060	8,640	8,158	6,737	7,060	7,527	8,000	8,000	to 9,000
Other overhead expenses	31,440	34,003	34,381	33,402	35,804	33,236	29,780	29,069	29,627	31,000	31,000	to 33,000
Total production expenses	133,139	139,444	139,960	140,377	142,669	133,956	122,367	127,998	134,963	142,000	142,000	to 147,000

1/ Includes operator dwellings. 2/ Beginning in 1982, miscellaneous operating expenses include other livestock purchases & dairy assessments. Totals may not add because of rounding. F = forecast. 1987 & 1988 expenses include preliminary revisions from the Census of Agriculture.

Information contacts: Chris McGath (202) 786-1804, Diane Bertelsen (202) 786-1808.

Table 37.—CCC Net Outlays by Commodity & Function

COMMODITY/PROGRAM	Fiscal year									
	1982	1983	1984	1985	1986	1987	1988	1989	1990 E	1991 E
	\$ million									
Feed grains	5,397	6,815	-758	5,211	12,211	13,967	9,053	3,384	4,270	6,099
Wheat	2,238	3,419	2,536	4,691	3,440	2,836	678	53	522	2,061
Rice	164	664	333	990	947	906	128	631	616	673
Upland cotton	1,190	1,363	244	1,553	2,142	1,786	666	1,461	-242	710
Tobacco	103	880	346	455	253	-346	-453	-367	-307	-138
Dairy	2,182	2,528	1,502	2,085	2,337	1,166	1,295	679	483	617
Soybeans	169	288	-585	711	1,597	-476	-1,676	-86	236	52
Peanuts	12	-6	1	12	32	8	7	13	-6	3
Sugar	-5	49	10	184	214	-85	-246	-25	0	0
Honey	27	48	90	81	89	73	100	42	69	44
Wool	54	94	132	109	123	152	1/ 5	93	121	120
Operating expense 3/	294	328	362	346	457	535	614	620	626	633
Interest expenditure	-13	3,525	1,064	1,435	1,411	1,219	395	65	609	262
Export programs 4/	65	396	743	134	102	276	200	-102	102	67
1988/89 Disaster/										
Livestock Assistance	0	0	0	0	0	0	0	3,919	2/ 96	0
Other	-225	-1542	1,295	-314	486	371	1,695	143	979	536
Total	11,652	18,851	7,315	17,683	25,841	22,408	12,461	19,523	8,174	11,739
FUNCTION										
Price-support loans (net)	7,015	8,438	-27	6,272	13,828	12,199	4,579	-926	431	704
Direct Payments										
Deficiency	1,185	2,780	612	6,302	6,166	4,833	3,971	5,798	4,620	6,445
Diversion	0	705	1,504	1,525	64	382	8	-1	0	0
Dairy termination	0	0	0	0	489	587	260	168	178	106
Other	0	0	0	0	27	60	0	42	4	6
Disaster	306	115	1	0	0	0	6	4	0	0
Total direct Payments	1,491	3,600	2,117	7,827	6,746	5,862	4,245	6,011	4,702	6,557
1988/89 crop disaster	0	0	0	0	0	0	0	3,386	2/ 6	0
Emergency livestock/										
forage assistance	16	0	0	0	0	0	31	533	90	0
Purchases (net)	2,031	2,540	1,470	1,331	1,670	-479	-1,131	116	-87	238
Producer storage										
payments	679	964	268	329	485	832	658	174	127	70
Processing, storage,										
& transportation	355	665	639	657	1,013	1,659	1,113	659	465	490
Operating expense 3/	294	328	362	346	457	535	614	620	626	633
Interest expenditure	-13	3,525	1,064	1,435	1,411	1,219	395	65	609	262
Export programs 4/	65	396	743	134	102	276	200	-102	102	67
Other	-281	-1,607	679	-648	329	305	1,757	-13	1,103	718
Total	11,652	18,851	7,315	17,683	25,841	22,408	12,461	19,523	8,174	11,739

1/ Fiscal 1988 wool & mohair program outlays were \$130,635,000 but include a one-time advance appropriation of \$126,108,000, which was recorded as a wool program receipt by Treasury. 2/ Benefits to farmers under the Disaster Assistance Act of 1989 are being paid in generic certificates & are not recorded directly as disaster assistance outlays. 3/ Does not include CCC Transfers to General Sales Manager. 4/ Includes Export Guarantee Program, Direct Export Credit Program, & CCC Transfers to the General Sales Manager. E = Estimated in the fiscal 1991 President's Budget. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

Information contact: Richard Pazdaleki (202) 447-5148.

Food Expenditures

Table 38.—Food Expenditure Estimates

	Annual			1990			1990 year-to-date		
	1987 R	1988 R	1989 R	Feb	Mar P	Apr P	Feb	Mar P	Apr P
\$ billion									
Sales 1/									
Off-premise use 2/	242.1	255.1	271.8	21.2	24.0	23.0	43.4	67.4	90.4
Meals & snacks 3/	182.0	196.4	208.0	15.9	18.3	18.1	32.1	50.4	68.5
1989 billion									
Sales 1/									
Off-premise use 2/	268.7	271.7	271.5	20.0	22.6	21.8	41.0	63.6	85.3
Meals & snacks 3/	198.2	205.4	208.0	15.5	17.7	17.4	31.3	49.0	66.4
Percent change from year earlier (\$ bil.)									
Sales 1/									
Off-premise use 2/	3.2	5.4	6.5	6.1	6.6	5.7	6.2	6.3	6.2
Meals & snacks 3/	10.9	5.2	6.4	6.0	6.9	5.0	4.1	5.1	5.1
Percent change from year earlier (1989 \$ bil.)									
Sales 1/									
Off-premise use 2/	-1.1	1.1	-0.1	-2.0	-0.9	-0.4	-1.8	-1.5	-1.2
Meals & snacks 3/	6.6	3.6	1.3	-1.3	1.9	0.0	-0.4	0.4	0.3

1/ Food only (excludes alcoholic beverages). Not seasonally adjusted. 2/ Excludes donations & home production. 3/ Excludes donations, child nutrition subsidies, & meals furnished to employees, patients, & inmates. R = revised. P = preliminary.

NOTE: This table differs from Personal Consumption Expenditures (PCE), table 2, for several reasons: (1) this series includes only food not alcoholic beverages & pet food, which are included in PCE; (2) this series is not seasonally adjusted, whereas PCE is seasonally adjusted at annual rates; (3) this series reports sales only, but PCE includes food produced & consumed on farms & food furnished to employees; (4) this series includes all sales of meals & snacks. PCE includes only purchases using personal funds, excluding business travel & entertainment. For a more complete discussion of the differences, see "Developing an Integrated Information System for the Food Sector," Agr.-Econ. Rpt. No. 575, Aug 1987.

Information contact: Aiden Manchester (202) 786-1880.

Transportation

Table 39.—Rail Rates; Grain & Fruit/Vegetable Shipments

	Annual			1989			1990			
	1987	1988	1989	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Rail freight rate index 1/										
(Dec. 1984=100)										
All products	100.1	104.8	108.4	108.0	106.9	106.9	107.1 P	107.1 P	107.1 P	107.4 P
Farm products	99.3	105.6	108.4	108.6	108.4	108.5	109.1 P	108.8 P	109.1 P	109.9 P
Grain	98.7	105.4	108.7	108.8	108.7	108.7	109.2 P	109.0 P	109.2 P	110.3 P
Food products	98.6	103.2	103.9	103.5	104.2	104.2	105.8 P	105.0 P	105.0 P	105.6 P
Grain shipments										
Rail carloadings (1,000 cars) 2/	29.0	30.7	28.4	30.2	31.7 P	29.4 P	32.7 P	32.4 P	29.5 P	27.9 P
Fresh fruit & vegetable shipments										
Piggy back (1,000 cwt) 3/ 4/	588	535	500	495	440	459	466	453	370	401
Rail (1,000 cwt) 3/ 4/	630	607	590	571	584	725	704	684	672	452
Truck (1,000 cwt) 3/ 4/	9,137	9,679	9,653	10,347	9,424	9,278	7,698	7,776	8,738	10,179
Cost of operating trucks										
hauling produce 5/										
Owner operator (cts./mile)	116.3	118.7	124.1	124.1	126.2	128.9	128.9	127.5	127.0	127.5
Fleet operation (cts./mile)	116.5	118.4	123.4	123.1	125.5	128.7	128.7	127.5	126.5	127.1

1/ Department of Labor, Bureau of Labor Statistics. 2/ Weekly average; from Association of American Railroads. 3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1989 & 1990. 5/ Office of Transportation, USDA. P = preliminary.

Information contact: T.Q. Hutchinson (202) 786-1840.

Indicators of Farm Productivity

Table 40.—Indexes of Farm Production Input Use & Productivity

(See the March 1990 issue.)

Information contact: Jim Hauver (202) 786-1459.

Food Supply and Use

Table 41.—Per Capita Consumption of Major Food Commodities

(See the January-February 1990 issue.)

Information contact: Judy Putnam (202) 786-1870.

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